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ABSTRACT

This volume presents methods and first-year findings from the urban and suburban/rural studies of Special Strategies for Educating Disadvantaged Children, a 3-year project that is collecting case study data on 10 different strategies identified as holding promise for educating this group of children. Data collected by Special Strategies involve only those schools that had Chapter 1 programs or were eligible to participate in Chapter 1 and includes observations of classroom instruction and student/teacher and student/student interactions; interviews with school-related staff appropriate to each of the program types; and surveys of parents, teachers, principals, district coordinators, and children in the third grade and above using instruments developed for the study. Selected first year observations show that: (1) little consideration is given to alterative educational options when administrators and/or teaching staff choose a student improvement curricular program, (2) the extent to which a strategy is easily and effectively implemented varies according to how extensive a change is required of teachers and administrators and the level of expertise of the teacher in both content matter and instructional delivery, and (3) successful program implementation requires additional funding and high levels of initial technical assistance and staff development. Appendices contain interview guides and research materials. (Contains over 100 references.) (GLR)

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ED 369 854

Urban and Suburban/Rural

SPECIAL STRATEGIES FOR EDUCATING DISADVANTAGED CHILDREN

First Year Report

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Urban and Suburban/Rural Special Strategies for Educating Disadvantaged Children

FIRST YEAR REPORT

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1994

This volume presents methods and first year findings from the urban and suburban/rural studies of Special Strategies for Educating Disadvantaged Children. *Special Strategies* is a three-year project that is collecting case study data on 10 different strategies that were identified as holding promise for educating disadvantaged children. The study is being conducted in 25 sites located in urban and suburban or rural areas. The selection of participating schools was limited to those that had Chapter 1 programs or were eligible to participate in Chapter 1. The sample includes students in the first, third, and ninth grades in the 1990-91 school year: these students will be followed for a period of three years. The strategies examined include Reading Recovery, computer-assisted instruction, METRA and other peer tutoring, extended-day and extended-year projects, schoolwide projects, Success for All projects, Comer School Development projects, Paideia projects, and Re:Learning/Coalition of Essential Schools projects. The *Special Strategies* studies accompany *Prospects*, the congressionally mandated longitudinal study of Chapter 1, and supplement the large amount of quantitative data collected by that study with rich observational and interview data that permits obtaining an in-depth picture of events in the lives of classrooms and students.

Data collected by *Special Strategies* include observations of classroom instruction and student/teachers and student/student interactions; interviews with school-related staff appropriate to each of the program types; and surveys of parents, teachers, principals, district coordinators, and children in the third grade and above using instruments developed for the *Prospects* study. Standardized tests were administered to all students. Additional performance measures will be obtained in year two. In addition, three children in each school are being followed throughout their school day in order to provide a close look at what the special strategy and school are like for these children.

Selected First Year Observations

- A curricular program or an organizational process to improve performance of students is often chosen by administrators and/or teaching staff with little consideration of alternative educational options.

- Strategies affecting the entire school day, such as schoolwide programs with site-based management, Comer projects, and Sizer projects, typically result in a higher incidence of coordination and integration with a school's regular classroom offerings.

- The extent to which a strategy is easily and effectively implemented varies according to how extensive a change is required of teachers and administrators, and the level of expertise of the teacher in both content matter and instructional delivery.

- Successful implementation of each of the strategies requires additional funding—not only to purchase the materials or hardware necessary to implement the programs, but for large staff development costs. To be effective all the programs require high levels of initial technical assistance and staff development, and ongoing staff development as well.

- The active leadership of the principal or a lead teachers is crucial to program implementation.

- Contextual variables such as the strength of the fiscal base, demographic shifts, and staff stability may impede or facilitate implementation. Schools experiencing the greatest difficulties initiating special strategies usually display other serious problems.

In years two and three, extensive efforts will be made to observe how strategies link with classroom practice and student outcomes. Patterns of successful implementation of innovative programs will continue to be examined in 25 original and some replication sites.

This report is the first in a series of three (3) volumes. Copies of this report can be obtained by writing the U.S. Department of Education, Planning and Evaluation Services, 400 Maryland Ave., S.W., Room 3127, Washington, DC 20202-8240.

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Executive Summary

The United States Department of Education awarded two contracts to examine promising alternatives to the services typically funded under Chapter 1. Both studies are being conducted by staff of the Johns Hopkins University and their subcontractor, Abt Associates Inc. This report summarizes findings from the first year of the Urban and Suburban/Rural Special Strategies Studies for Educating Disadvantaged Students.

This executive summary presents the major purposes of the Special Strategies studies, reviews the research methods, provides first year findings, and outlines steps planned for years two and three of the study. Readers should be aware that the strengths of the Special Strategies studies originate from the longitudinal nature of the undertaking. All first year findings are tentative.

Major purposes of the Special Strategies Studies

The Special Strategies Studies were developed to accomplish three primary goals. These are the following:

1. Describing promising alternatives to traditional Chapter 1 practices. This includes the collection of in-depth information about the day-to-day operations of a variety of innovative teaching and programming strategies.
2. Comparing the characteristics of those promising alternatives to more traditional practices. This includes the gathering of various process and outcome measures across several program types and, where available, contrasting those results with the more quantitative data gathered in *Prospects*.
3. Assessing the replicability of programs that appear most successful. This includes evaluating factors that may facilitate or impede implementation elsewhere.

Methods

The design of the study calls for gathering qualitative and quantitative data at sites representing six urban program types, and six suburban/rural program types. The specifications of the Request for Proposals required that some categories of programs, such as Chapter 1 schoolwide projects, be sampled in both the urban and the suburban/rural contracts. Therefore, the total number of strategy types under investigation is ten.

The strategy types sampled include Reading Recovery, computer assisted instruction, METRA and peer tutoring programs, extended day and extended year projects, schoolwide projects, Success for All, Comer School Development programs, Paideia projects, and Re: Learning/Coalition of Essential Schools. For the purposes of this first year report, these strategies are discussed under three umbrellas: philosophy-based strategies, schoolwide strategies, and adjunct strategies.

Philosophy-based strategies

Mortimer Adler's (1982) *Paideia Proposal: An Educational Manifesto* served as a clarion call for improved quality of schooling for all children. Adler stated that all children are entitled to academic "cream," rather than some being given cream while others receive "skim milk." Through the reading of challenging material, didactic instruction, coaching, and "Socratic seminars," students are encouraged in the "development of [higher order] intellectual skills."

The Coalition of Essential Schools (CES) was developed by Brown University's Theodore Sizer. Dr. Sizer worked for several years with Mortimer Adler, and the effects of those years are easily seen in CES's nine principles. CES is a school restructuring proposal that outlines broad directions and leaves the construction of specific curricula and instructional methods in the hands of local educators. Re: Learning is an enhancement of CES being developed by the Education Commission of the States. The goal of Re:Learning is to provide support for CES principles "from the statehouse to the schoolhouse."

James Comer's School Development Program is rooted in the developer's experiences in community psychiatry at the Yale Child Study Center. Over several years, Dr. Comer has evolved a program that focuses the school's and families' attention and social service programs to the total needs of children. The Comer program stipulates that by addressing the full range of students' needs, and by integrating services in schools, school staff can more adequately meet the academic and other needs of children and families.

Schoolwide projects

A variety of projects can be implemented under Chapter 1's "schoolwide project" option. In the suburban/rural study, the schoolwide project schools have virtually eliminated pull-out programs. In the urban study, sites are being examined that mix reduced class size and other advantages of the schoolwide option with the availability of additional instructional specialists. Two of the urban schoolwide projects were selected because they chose to extend students' school years.

Success for All is an intensive school restructuring program designed to be implemented schoolwide in highly disadvantaged, typically urban settings. The goal of the program is to have all students reading on grade level by the end of third grade. Success for All was developed at Johns Hopkins

University. Although neither of the project directors is associated with Success for All, in order to ensure impartial program examination and reporting, all data gathering and case write-ups associated with that program are conducted by Abt staff.

Adjunct programs

Reading Recovery is an intensive, first grade, one-to-one tutoring program. Reading Recovery was developed in New Zealand by Marie Clay. In Reading Recovery students spend one half hour per day for up to 12 weeks with a highly trained reading specialist. The time is spent reading several books with known difficulty levels, and in writing activities. Two assumptions of Reading Recovery are that students who are having difficulty learning to read can be taught to read in 12 weeks, and that once they have learned a set of reading skills, the students can progress for several years without needing further remedial assistance.

The Computer Curriculum Corporation (CCC) offers one of the more widely implemented integrated computer assisted instruction packages. In CCC, students spend 12-25 minutes each day in interactive, computer driven instruction. A file server records each student's pattern of answers each day, and selects new activities for each child for the following day. This particular commercial program was chosen not as a commercial endorsement, but because it has a longer and more often independently documented evaluation history.

METRA is a commercially available, highly structured reading tutorial program that has been found to produce significant gains in achievement. METRA can be implemented either in a cross-age peer tutoring format, or as a para-professionally delivered program. A locally developed peer tutoring program is being examined as a companion to METRA.

The logic of extended day and extended year programs is straightforward: if students aren't learning enough, provide them with more, and perhaps varied, instruction. It is also often argued that one reason American students don't perform as well on international comparative studies is that students in the U.S. go to school for fewer hours per day and fewer days per year than students in any other first world country. In the Special Strategies studies, both after school and summer school efforts are being examined. These include a summer migrant project which serves both migrating and "settled out" migrant students.

Choosing exemplary sites

For each of the above program types, Special Strategies researchers sought nominations for two "exemplary" sites. Nominations were received from program developers, state Chapter 1 directors, educational researchers, national educational laboratories, and Chapter 1 Technical Assistance Centers. In each case, an effort was made to obtain additional, independent support for the nomination. Twenty-four sites were identified and agreed to participate. Early in year one it was determined that an ongoing desegregation suit in one city might cause considerable changes in a site, and an additional site was obtained as a precautionary measure. This resulted in a total of 25 sites in 17 states. The sites are located in the Northeast, South, Midwest, and West. Sites range from the Pacific coast to the Atlantic, from near the Mexican border to near the Canadian. Schools in the sample serve student populations that reflect African, Asian, Hispanic, Native American, and European origins.

At each site data are gathered at the student, classroom, school, program, and district levels. Much of the data being gathered is qualitative. In addition, the process includes gathering low- and high-inference classroom observations, and structured interviews of parents, teachers and administrators. Nearly half of researchers' field time is devoted to "whole day studies" of individual students. Once identified, a student is shadowed for the full three years of the study. Outcome data being gathered over the three years include norm-referenced and performance tests of achievement, attendance, student grades, and several other measures.

To the extent possible, data from the Special Strategies studies will be used to supplement the data from the larger, nationally representative Prospects sample. However, Special Strategies began six months earlier than Prospects, and the two studies remain on somewhat different schedules.

Both Special Strategies and Prospects are designed to test a specific, multi-level model of Chapter 1 effects. That model is described in the first chapter.

First year observations

1. *Virtually all of the programs being studied appear to possess some clear and often unique advantages which might recommend them to some schools and school districts.*

   Several of the programs (for example, CCC, Reading Recovery, METRA, Success for All) had previous research indicating their effectiveness in particular settings. Some of the strategies represent thoughtful efforts to bring "higher order" or more integrative learning experiences to disadvantaged students (for example, Paideia, the Coalition of Essential Schools). While the foci of the programs differ greatly, the relevance of their efforts to improve the education of disadvantaged children is clear. If practitioners were searching for attractive alternatives for educating disadvantaged students, the programs involved in Special Strategies present a solid first list from which to begin the search.

2. *A specific strategy is often chosen by administrators and/or teaching staff with little consideration of alternative educational options.*

   While there are examples within the study of district or school level staff engaging in an extended needs assessment process and systematically searching for alternatives, there are more examples of a strategy simply being imposed from above, or of a school choosing a strategy after only word-of-mouth recommendation.

3. *There appear to be some urban/rural differences in the processes by which new strategies are chosen for schools.*

   In large urban areas, the impetus to implement a philosophical approach usually comes from within the schools. In smaller cities and towns, the influencing factors tend to be external—the state education agencies (SEAs), for example. For schoolwide projects, the impetus is reversed—small-town and rural principals are more likely to initiate such efforts than are urban principals.

4. *Strategies designed to affect students' whole days typically resulted in higher levels of interactive instruction throughout the students' reading, language arts, and mathematics classes than programs which are adjunct to the regular day.*

   For example, in first and third grade Special Strategies sites, students spent an average of 80 percent of in-school time in instructional settings, but the proportion of time in instruction ranged from 38 to 96 percent.

   Adjunct programs often provided valuable services to students during their pullout periods, but typically did not result in high rates of student engagement during the remainder of the day.

5. *The "Special Strategy as received by students" varied within and across sites and programs in relation to each school's skill at implementing new programs, teacher expertise, and magnitude and intensity of the intervention.*

   Whole day observations of students at each school often left different impressions of the special strategy and its implementation at the school than would have been gleaned from a simple set of interviews, or from reading published descriptions of the strategy. Many of the complexities of implementing a program that can improve students' academic lives are seen very differently when viewed from the perspective of individual students.

6. *Most strategies have benefited from additional funding for individual schools.*

   While the provision of such funds does not ensure a smooth start-up, the absence of adequate fiscal support can stop implementation. Districts, states and foundations each have played critical roles in providing support for various special strategies. In several schools, the recent increases in Chapter 1 funding have been the primary financial source supporting special strategies.

7. *Externally developed programs requiring fidelity to a pre-specified model require support from either model developers or other high-quality technical assistance.*

   The schools in which such strategies as Reading Recovery, CCC, Paideia, the Coalition for Essential Schools, Success for All, and the Comer School Development Program were well implemented were invariably the recipients of extended, often collaborative training or assistance from the developers.

8. *Schools experiencing the greatest difficulties initiating special strategies usually display other serious problems such as severe fiscal constraints, racial tensions, and inadequate school and district level leadership.*

9. *Active leadership is crucial to program implementation.*

   The various special strategies required somewhat different leadership skills to implement. However, in every site visited by the Special Strategies teams, the principal's level of commitment to the chosen program, organizational skills, and ability to motivate staff were relevant to the coherence of the program as implemented.

10. *There appear to be powerful contextual variables which facilitate or impede implementation of the various strategies.*

    All special strategies appear to be subject to local variables that transcend particular strategies. Unanticipated school district budget distress was one of several issues that invariably produced negative impact on implementation efforts. Local access to strategy-specific technical assistance almost always had a positive impact.

11. *District and state commitment to ongoing staff development can be a key in facilitating special strategy implementation and institutionalization.*

    Regardless of the strategy type being observed, local and often state support for ongoing professional development in that strategy consistently was associated with higher levels of implementation. Whether the program being implemented was seemingly self contained (for example, "pull-out" computer assisted instruction) or a schoolwide effort at a philosophy-based approach (for example, the Coalition of Essential Schools), ongoing, long-term support for development of professional skills was critical to the health of the strategy-as-implemented.

12. *Specific implementation issues vary with the intended magnitude and scope of the special strategy on the structure of the school and the content of instruction.*

    While many of the above findings relate to general issues in implementation, several issues relate to specific types of programs. The range of issues is illustrated in the following two examples. Reading Recovery requires a full year of intensive training for prospective first grade teachers before they are certified as Reading Recovery specialists, but the program does not include training for second grade teachers (although some schools offer this and more). Paideia schools require significant changes in the daily teaching patterns of all teachers, but these can be phased in over several years.

13. *With the possible exception of some adjunct programs, all special strategies visited continue to evolve.*

    An easy mistake would be to believe that any of the schools in the Special Strategies studies is now "doing [its strategy] right." In almost every instance, schools continue to struggle with and evolve new methods for implementing their chosen special strategy. These implementations are proving to be highly dynamic, and that finding underscores the wisdom of building both Prospects and Special Strategies as longitudinal studies.

14. *Central to replication efforts is the systematic exploration of the preconditions for implementation; the roles of such key staff as principals, faculty and parents; the explicit relationship between the special strategy and instructional methods and curriculum; and the extra visible as well as hidden costs associated with implementation.*

    Year Two and Year Three site visits to the primary and replication sites will focus on issues of longitudinal development of programs within sites, roles of staff and parents, and out-of-pocket and opportunity costs of the various programs in differing contexts.

Next steps

The above 13 tentative conclusions should be regarded as testable hypotheses. The next two years' efforts can provide more nearly definitive statements regarding those hypotheses, and perhaps will lead to additional findings. During the second and third years of the Special Strategies studies, Hopkins and Abt staff will complete these steps:

1. *Gather second and third year student, teacher, parent, school, and program data in the 25 core schools.* As this report approaches final form, reports from the fall/winter 1991/92 site visits are indicating stability at some sites and significant changes at others. Understanding these evolutionary processes is critical to understanding the strengths, limitations, implementability and institutionalization of the various programs in schools.

2. *Visit 24 additional schools in a stepwise replication fashion.* By making shorter visits to replicates, researchers explore the generalizability of findings from the more in-depth sites. In almost every program type, Special Strategies researchers are visiting at least one nearly full implementation. However, contextual issues which shape program success appear to be powerful. Are programs which work well and make academic sense in rural and suburban areas, often less than adequate in urban areas? Are critical components not available in some contexts? When technical assistance is not readily available, how does implementation and institutionalization proceed? For answers, these questions require studying multiple sites in diverse contexts.

3. *Conduct longitudinal analyses of the various programs' implementation costs and effects.* These will include tests of the Chapter 1 effects model developed for this study. First year outcome data, including local and Prospects sources, lacked sufficient depth for making clear statements regarding plausible outcomes of schoolwide projects, philosophy-based models, or adjunct programs. The addition of longitudinal data in years two and three will greatly enhance our understanding of these programs's effects.

Acknowledgments

The conduct of a multi-year, multi-program, multi-method evaluation is necessarily a complex task. It could not be undertaken without the supportive efforts of local educators, students, parents, and a significant number of researchers.

The first people deserving thanks are the students and parents who are participating in the study. Thanks to the over 1,000 students who took extensive tests for the first year of Special Strategies. Over 500 parents completed detailed questionnaires, and deserve equal appreciation. In addition, 75 students and their parents have agreed to participate in more extensive observations and interviews. These families are making valuable contributions to our understanding of the workings of the various special strategies in the lives of the programs' intended recipients.

Nearly 100 teachers, 25 principals, and over 20 district Chapter 1 coordinators are graciously allowing Special Strategies researchers to visit their classrooms, schools, and programs. We owe them our deep gratitude.

Dr. Linda Winfield co-directed the Urban Special Strategies Study during its first year and much of its second. Her insights permeate many of the findings of this report. Her chapters on the "Characteristics of Programs and Strategies" and "Students Whole School Days" contribute greatly to this volume.

I owe special thanks to Dr. Mary Ann Millsap. Dr. Millsap is co-directing the Urban Special Strategies Study, and serving as the lead researcher and administrator on the Abt Associates subcontracts for these studies. In addition to her methodological and analytic wisdom, Dr. Millsap has provided me and others at Johns Hopkins with a great deal of practical advice on the management of contract research tasks. Beyond authoring or co-authoring the chapters on "Characteristics of Programs and Strategies," and "Issues in Replicating Special Strategies," Dr. Millsap made major contributions to the overall outline of this report. Many of the first year findings derive directly from her insights.

The authors of the various chapters deserve recognition for their analytic and writing skills. Nancy Brigham, Dr. Pamela Nesselrodt, Delois Maxwell, and Dr. Beth Gamse all performed admirably in bringing the data together of 75 "Whole School Days" which comprise Chapter Four. Dr. Gamse also worked long and hard to produce the valuable "Parent Involvement" section (Chapter Nine.) Dr. Bonnie Randall read deeply into the 25 case studies to produce the chapter on "Getting Started" (Chapter Five). Dr. Mike Puma lead the analytic and writing efforts regarding "School-Level Factors for Implementation," "Staff Development," and "External Factors for Implementation" (Chapters Six, Seven, and Eight).

Special thanks go to the field teams who collected and analyzed data, wrote case reports, and worked with us to explore themes and trends across sites and programs. The members of the field teams were Dr. Beth Gamse, Dr. Mary Ann Millsap, Dr. Mike Puma, Dr. Bonnie Randall, Margaret Hargreaves, Steve Marcus, Mark Menne, Mark Moss, Carol Prindle, and Marsha Schieck of Abt Associates, Nancy Brigham of North Kingstown, Rhode Island; Sheila Rosenblum of Philadelphia; Dr. Eugene Schaffer and Dr. Pamela Nesselrodt of the University of North Carolina at Charlotte; Dr. Lana Smith of Memphis State University; Dr. Larry Dolan, Dr. Nancy Karweit, Dr. Robert Stevens, Dr. Linda Winfield, Mary Alice Bond, Barbara Boward, Scott Durkin, Gretta Gordy, and Delois Maxwell of Johns Hopkins University. Their intelligence, insight, and writing skills have enriched these studies immeasurably.

Lyndell Smith designed the format for a more readable report. She provided valuable editorial suggestions and improvements in the text.

The Special Strategies Studies Advisory Work Group helped with instrument design, reviewed preliminary findings, and critiqued this report. The work group members are Dr. Robert Carlson, University of Vermont; Dr. Carolyn Evertson, Vanderbilt University; Dr. Antoine Garibaldi, Xavier University; Dr. Ruth Johnson, California State University—Los Angeles; Twila Martin Kekahbah, Chairperson, Turtle Mountain Band of the Chippewa Nation; Dr. Matt Miles, Center for Policy Research; and Rafael Valdivieso, Academy for Educational Development.

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Chapter One

Overview

by

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The first chapter of this report presents the purposes of the Special Strategies studies, the design of the studies and a review of relevant research, and introduces the model being used throughout the study. The first chapter concludes with an overview of the organization of the full report.

The federal Chapter 1 program

From its inception, Title I and now Chapter 1 has made important contributions to American education and has enhanced the educational opportunities of millions of disadvantaged children (LeTendre, 1991).

Chapter 1 supports state and local programs' efforts to help educationally disadvantaged students achieve academically at the level of their non-disadvantaged peers. Chapter 1 is easily the largest Federal grant program in elementary and secondary education. Over the 27-year history of the program, total funding for Title I/Chapter 1 has exceeded $80 billion, and funding for the 1991-92 school year continued to exceed previous highs reaching $6.2 billion. From the 1986-87 school year to the 1992-93 school year, actual funding for Chapter 1 has increased more than 90 percent, from $3.5 billion to $6.839 billion. Chapter 1 now serves over 5.5 million elementary and secondary school students each year. Over 75 percent of all U.S. elementary schools receive Chapter 1 services.

Public Law 100-297, the 1988 reauthorization of Chapter 1 known as the "Hawkins-Stafford Amendments," brought the most sweeping changes in the history of federally supported compensatory education. The new law called for increased funding of compensatory education in exchange for increased accountability and a much greater emphasis on "program improvement" (Jennings, 1991).

Numbers often do not tell the story of a program in ways that practitioners and policy persons can hear. What is the importance of Chapter 1? In the words of the principal of a Special Strategies school, "Resources are fewer and fewer. Chapter 1 is the only program responding to the needs of children and teachers. Without Chapter 1, I don't know where we'd be."

Public Law 100-297 also mandated a national, longitudinal study of the effects of Chapter 1. As part of its response to the Congressional mandate, the U.S. Department of Education funded a series of planning papers (Policy Studies Associates, 1989) and a formal design study for the national longitudinal study (Abt Associates, 1989). To date, those two efforts have led to the funding of three research studies. The largest of those studies is *Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity* (Abt Associates, Westat, Johns Hopkins University, Educational Testing Service, 1990b). Prospects is a 6.5 year national study of the effects of Chapter 1, and it will be briefly described below. The two additional research undertakings are the "Special Strategies" studies, the subject of this report.

Relationship to Prospects

The Special Strategies studies and Prospects as conceptualized by U.S.E.D., have unusual and unusually valuable linkages. Therefore, several important features of Prospects will be introduced now. Prospects is a $35 million study of the education of disadvantaged students. Using a carefully constructed sample, Prospects is gathering achievement, questionnaire, and archival data (for example, attendance, grades) on over 40,000 U.S. students. Students are in the first, fourth, or eighth grades during the fall of 1991. (Pretesting of the third--and seventh—graders was completed during spring 1991, with pretesting of first graders occurring during the fall of 1991.) The sample was drawn to reflect regional, urban, suburban, and rural differences. It includes cohorts from schools that serve virtually 100 percent free lunch students to schools that serve almost no free lunch students. Special efforts were made to ensure that the sample contained significant numbers of migrant students, language minorities, Native Americans, and Alaskan Natives. In addition to the basic group of over 300 schools, the sample has been enhanced with a set of sectarian private schools, a set of schools enrolling high proportions of limited English proficient children, and by the Special Strategies sample. All of the later enhancements were drawn non-randomly.

The Prospects study is designed to improve understanding of both the short-term and long-term effects of significant participation in Chapter 1 programs. Among the key issues to be investigated in Prospects are the following:

1. How do Chapter 1 participants compare with peers on standardized tests and other outcome measures?
2. How do students receiving different types of Chapter 1 services perform throughout their student careers?
3. How are outcomes for Chapter 1 participants affected by different levels of parental involvement?
4. What types of Chapter 1 programs work best, and for what types of students?

5. What are the effects of Chapter 1 participation on grade promotion, school completion, and post-secondary school aspirations?

Although Prospects will present unique insights into the workings of Chapter 1, and of the educational progress of disadvantaged students generally, there are some questions that a large scale test and questionnaire study cannot logically be expected to answer. First, the Prospects analyses will be descriptive or correlational in nature. As has often been noted, Chapter 1 is a funding source, not an identifiable "program." Therefore the effects of various programs funded under Chapter 1 may not be readily discernible within Prospects. Second, many of the most promising practices now occurring in compensatory education are happening in relatively small numbers of sites. The probability that Prospects would include multiple Reading Recovery and Re:Learning sites, for example, was negligible. Third, Prospects was not designed to provide rich, qualitative data of the type often useful to both policy makers and practitioners regarding the most promising programs.

Given these design limitations, the U.S. Department of Education chose to fund two additional studies which looked in detail at the characteristics of "Special Strategies" in use in Chapter 1. The studies use all of the data sets gathered for Prospects, and add three years of highly detailed, qualitative case study data on a set of programs which appear to offer particular promise for improving the performance of Chapter 1 students.

Purposes of the Special Strategies studies

Historically, most Chapter 1 funds have been used to purchase remedial pullout or in-class services for students who are experiencing difficulty in school (Kennedy, Jung, & Orland, 1986). As the program has matured, however, schools have begun to experiment with alternatives to these approaches.

The United States Department of Education's Office of Planning and Policy has funded two related "Special Strategies" studies to investigate innovative programs designed to work with disadvantaged students; one study is focused on urban schools and the other on suburban and rural schools. These "Special Strategies" studies are designed to do the following:

- Describe promising alternatives to traditional Chapter 1 practices, such as schoolwide projects, extended day or extended year programs, one-on-one tutoring, integrated mental health and parent involvement services, computer-assisted instruction, and comprehensive school reform;
- Compare these promising alternative strategies to traditional Chapter 1 practices in terms of program characteristics as well as various outcomes;
- Collect in-depth information about the day-to-day operations of a variety of innovative

teaching strategies and link these data with student outcomes;

- Determine, among different strategies, how student outcomes vary across types of schools and students; and
- Assess the replicability of alternative and successful methods of Chapter 1 instruction by evaluating factors that facilitate or impede implementation elsewhere.

This first year report of the three year Special Strategies Studies describes the research methods, connections to the larger Prospects analyses and programs selected for study, and provides preliminary process data regarding schools being studied. The second- and third-year reports will present expanded sets of process data, together with achievement and other outcome data relevant to the Special Strategies hypotheses.

A brief history of Title I and Chapter 1 with a review of relevant research

What is now Chapter 1 evolved from the landmark legislation, the Elementary and Secondary Education Act (ESEA) of 1965. It was the first legislation in the "war on poverty." Title I of ESEA became the "cornerstone of federal aid to our nation's elementary and secondary schools" (Vanecko & Ames, 1979). The intent of the legislation was to "provide financial assistance to local education agencies serving areas with concentrations of children from low income families to expand and improve their educational programs." McLaughlin (1975) has noted that ESEA was the first federal aid measure to address the needs of disadvantaged students rather than the fiscal deficits in local school districts, and it was the first major piece of social legislation to require evaluation.

In 1981, Title I was replaced by Chapter 1 of the Education Consolidation and Improvement Act (ECIA). The new law maintained the overall intent of Title I, but eased federal involvement by specifying that the program would be administered, "in a manner which will... free the school of unnecessary federal supervision, direction and control" (P.L. 100-297, sec. 1001.2.c.).

The Hawkins-Stafford Amendments of 1988 offered additional latitude and impetus for change. The 1988 amendments reflected two key congressional concerns (Jennings, 1991). First, the new law links identification of quality programs with positive outcomes over time. Second, the amendments provide new evaluation reporting requirements in order to ensure that poor quality programs are identified and improved.

One result of the 1988 Hawkins-Stafford Amendments and subsequent large increases in Chapter 1 funding has been a great increase in local attention to Chapter 1. Increased funding has allowed districts to explore new options. Increased accountability, and particularly the addition of school-level accountability, has forced districts to reexamine old programs.

Research on Title I/Chapter 1 may be thought of as having occurred in three generations. A first generation was marked by naive views regarding the potential impact of limited programs, and a lack of psychometric rigor. David and Pelavin (1977) noted that many early studies of Title I impact lacked a clearly defined criterion for comparison of effects. When huge gains in achievement did not materialize as a result of 2-10 percent increases in fiscal support, the original goal of Title I students "catching up" with their peers was revised downward to an "eight month gain per year" criterion (Thomas & Pelavin, 1976). Most criteria were specified in grade equivalent scores. Grade equivalent scores of that time were psychometrically inadequate for measuring growth because they were not normally distributed and were not hierarchically scaled. McLaughlin (1975) concluded that researchers were attempting to evaluate a program with diverse components, that researchers encountered problems in obtaining local cooperation, and in general, that these research efforts failed.

A brief, though valuable, second generation of Title I effects studies included the Sustaining Effects Study (SES) (Carter, 1984, and various technical reports), re-analyses of SES data (e.g., Frontera, 1986), a fairly large-scale attempt at independent replication of the SES (Gabriel et al., 1985), and a U.S. Department of Education analysis of local, state and national program data (Anderson & Stonehill, 1986). The second generation studies indicated that—

1. On average, Title I programs have a modest, positive effect on the achievement of disadvantaged students.

2. Achievement gains made by Title I students appeared to be greater in earlier grades.

3. Achievement gains were not consistently associated with either dollars spent (though note that, by definition, all Title I programs involved the expenditure of some additional dollars), or with the application of any single educational approach.

4. Students who were "promoted out" of Title I continued to perform at their enhanced levels, and did not seem to revert to lower achievement levels during the first year after compensatory education services had been discontinued. However, gains were generally not sustained over a period of more than two years following program participation.

5. Title I programs were most effective for students who were only moderately disadvantaged, but Title I did not appear to substantially improve the relative achievement of the most disadvantaged students within the schools.

The second generation studies suffered from inadequate control group choices, unit of analysis problems, and the use of measures too distal to students' academic lives (for review of these issues, see Abt Associates, Johns Hopkins University, WESTAT, & Educational Testing Service, 1990).

Perhaps the most valuable contribution of the SES and the studies it spawned was their collective provision of descriptive data on some stable aspects of Title I practices. If, for example, Title I were to have an impact, we would expect recipients to "graduate out" after one or two years, and remain out in subsequent years. Carter (1984) reported that after one year's participation, about 25 percent of Title I students were promoted out of Title I and were able to maintain their regular status. Others have found that in Title I reading programs, 20 percent to 30 percent of first year recipients graduated out of Title I and remained out for at least the next two years (Frontera, 1986). In math , the proportion was 30 percent. However, these "graduating out" students were also, on average, the highest achievers of any in the Title I participation group (Frontera, 1986).

The post-SES years have witnessed few large-scale studies of teacher, school, or compensatory education effectiveness, particularly at the elementary grades. Rather, the 1980s were a time of interestingly crafted smaller studies and of Chapter 1 relevant literature reviews. These comprise the third generation of Chapter 1 studies. A detailed discussion of these third generation studies may be found in Slavin, Stringfield, and Winfield (1992). Third generation studies indicate the following:

1. The setting in which Chapter 1 services are delivered (in-class versus pullout) is not as important as the quality of services provided.

2. Research on instructor type (e.g., specialists or instructional aides) is inconclusive relative to cost/benefit.

3. Research relating teaching behaviors to disadvantaged students' achievement gains has found several stable predictors of gains: high content coverage, maximum time allocated to instruction, high engaged time, consistent student success, active teaching, teachers' structuring information, and frequent questioning with relatively high correct responses. Brophy (1986) is particularly thorough in discussing this area.

4. An unusually carefully conducted study of Chapter 1 instructional effectiveness (Crawford, 1989) indicated that Chapter 1 teachers obtained greater achievement gains when they provided considerable challenge to their students, praised 10-15 percent of students' correct responses, and provided fast feedback for incorrect student responses. Whereas previous teacher effectiveness studies had found negative correlations between achievement gain and teachers working one-on-one with students, Crawford found that, in the often quite small Chapter 1 groups, one-to-one instruction was positively correlated with achievement gain.

5. Allington and Johnston (1989) concluded that improved coordination between regular teachers and compensatory education staff was one key to improved compensatory education.

6. Slavin (1987) identified four broad types of promising programs for at risk students. These were continuous-progress programs (e.g., DISTAR, U-SAIL), cooperative learning, pre-

ventative and remedial tutoring programs, and some types of intensive, integrated computer-assisted instructional programs.

These third-generation studies offer more grounds for optimism regarding a meaningful Chapter 1 effectiveness literature.

Research methods

Staff from the Center for Study of Effective Schooling for Disadvantaged Students (CDS) of Johns Hopkins University and from Abt Associates Inc., the subcontractors on the Special Strategies projects, are conducting these studies over a three year period. Data are being gathered in urban, suburban, and rural schools. The study involves a multiple method approach, blending qualitative case study and quantitative techniques. At each school data are being gathered at the student, classroom, program, school, and district levels. A particular emphasis concerns the effects of the various programs on the lives of individual students who are being closely followed over the three years.

Discussion of research methods will proceed through stages. First, the model of Chapter 1 effects which is guiding our research will be presented. This is followed by a description of the program types included in the Special Strategies study. A description of instrumentation leads to a discussion of research procedures.

Following Miles and Huberman (1984) and Yin (1989) in a qualitative tradition, and various scholars from a more quantitative tradition, the Special Strategies studies (and to a lesser extent, Prospects) attempt to gain focus and sharpen hypothesis testing through the positing of a specific model of Chapter 1 effects. That model is described below.

A model of Chapter 1 effects

Research by Burstein (1980), Willett (1988), Rogosa (1989), and Raudenbush and Bryk (1986, 1988) demonstrates that a valuable model of the effects of schooling must meet the following criteria:

- It must specify variables in a multilevel fashion (e.g., students learn within classes within schools).
- It must specify effects across levels, beginning with individual students.
- Desired outcomes should be measured at three or more points in time.

By gathering data over several years, Prospects and Special Strategies studies effectively address the psychometric concern regarding reliability of multi-wave growth measurement (Willett, 1988). The other two concerns, explicit specification and multilevel modeling, are addressed in the following model (Figure 1.1 on page 1-10) of the effects of Chapter 1 on students' academic lives.

This model of Chapter 1 effects has "four plus" levels. The first is the individual student as learner. The second level concerns groups which have regular, academically relevant, direct interactions with the students, including regular classroom teachers, persons providing additional academic services, such as Chapter 1 or special educational services, and parents. Schools represent the third level in the model, encompassing principals, other school level personnel, and programs which affect student learning by affecting the ways in which students, teachers, and parents act and interact. Beyond the schools lie additional levels, comprised of a variety of additional indirect influences on achievement. These levels include the community, the school district (including the management of various categorical programs), and state and federal sources of programming, funding, and assessment. Most of the "four plus" level structures affect students' achievement through regulatory requirements, and by providing goals, directions, and technical assistance.

Level 1: Student as learner

The model begins at the level of the student, building on John Carroll's "A Model of School Learning" (1963, 1989). Carroll views students' academic learning rate as a function of five elements:

1. *Aptitude.* That is, students' general abilities to learn. Carroll (1989) noted that, "high aptitude is indicated when a student needs a relatively small amount of time to learn" (p. 26).

2. *Ability to understand the instruction.* Is the student academically prepared to gain from the lesson? Does she or he possess the necessary skills or knowledge for understanding the lesson? Ability to understand instruction also includes students' abilities to "figure out for themselves what the learning task is and how to go about learning it." (Carroll, 1989, p. 26).

3. *Perseverance.* How long is the student willing to work to learn the assigned information? Perseverance is in large part a function of students' motivation. A student's prior rate of success becomes one predictor of willingness to persevere. Parent, peer, and teacher encouragement have obvious relevance to students' willingness to persevere.

4. *Opportunity.* How much time is allotted to learning the information? Carroll (1989) noted that time spent learning is the lesser of aptitude (time needed), opportunity, and perseverance.

5. *Quality of instruction.* How effective is the instructional delivery? For Carroll, quality of instruction was high if students learned the material as rapidly as their abilities and levels of prior knowledge allowed. Low quality curricula or instruction would result in the need for additional learning time.

Other cognitive researchers have elaborated on specific terms used by Carroll (ex., discussions of "schema," "scaffolding," and "rehearsal in short term memory") which could be used to expand model aspects without requiring fundamental additions to or subtractions from this basic model of school learning.

Level 2: The provision of schooling-relevant instruction to students

A second level of the model of Chapter 1 effects concerns the selection and presentation of academic content to the student-learners. Slavin (1987) used Carroll's work as a foundation on which to build a "theory of effective classroom organization." He began with the components of the Carroll model which are potentially within the control of a teacher. Slavin's model assumes that students learn new information in relation to the *Quality* of their instruction, the *Appropriateness* of the academic level of information to be learned, their level of *Incentive* to learn, and the *Time* they invest in the learning. This has been summarized as *QAIT*. As Figure 1.1 illustrates, there are several groups of adults who may have direct impact on individual student's QAIT, and hence on gains in academic and other desired outcomes over time. These are parents, regular classroom teachers, and any other adults associated with categorical or supplementary school programs. Three of the four groups directly affecting QAIT (regular, Chapter 1, and supplementary teachers) work in schools.

There are two components to Level 2. The first concerns the dimensions of effective education which must be provided for students to acquire academically-relevant knowledge. These are general principles applicable to regular classroom teachers, parents, and any "special" program providers. The second is the specific people providing the education. The methods available and typically explored by parents are often quite different from those considered by regular classroom teachers. The instructional and curricular options available to a compensatory education computer laboratory teacher or reading tutor bear little resemblance to each other, or to those used by regular teachers or parents. The first half of this section describes Slavin's general principles for organizing academic instruction. The latter notes particular adaptations made by the various role players involved in educating children.

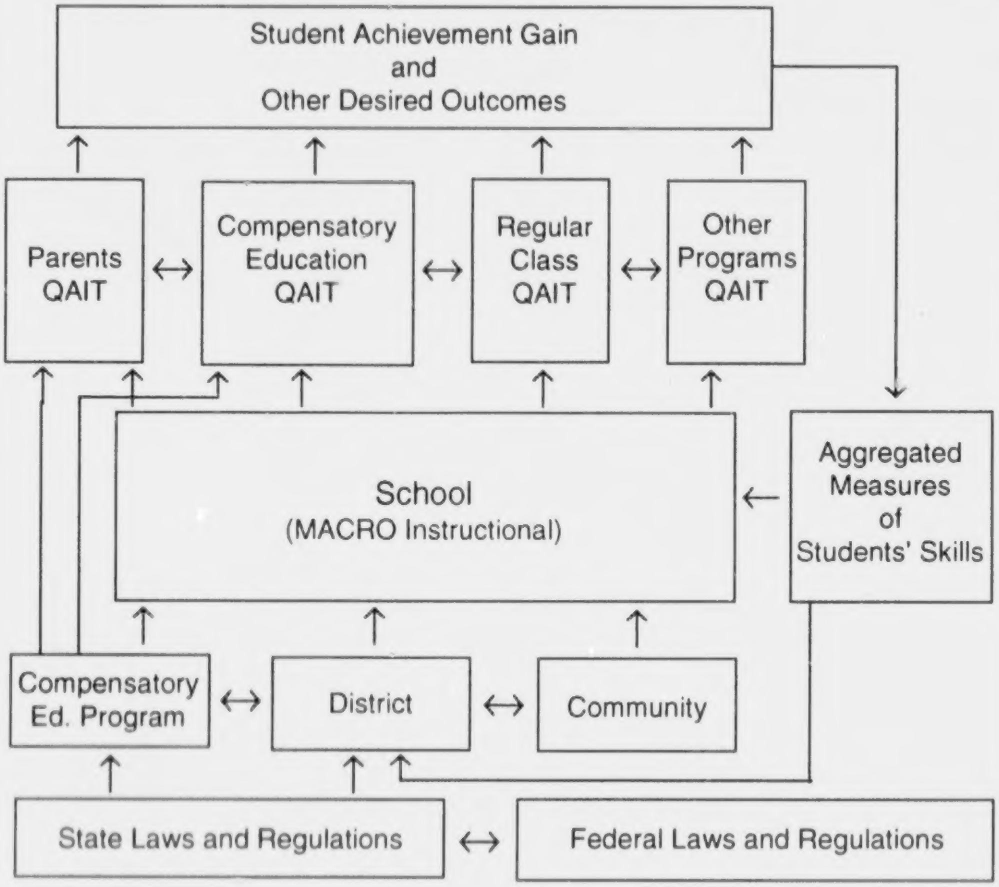
General principles across all providers

The variables in the Carroll and Slavin models have been previously studied and, to varying degrees, supported. Research relating to each aspect of the QAIT model is described below.

Quality: Debates related to the quality of curricula and instruction have raged throughout the twentieth century. Regarding curricula, the most often-replicated finding is simply that, in general and within reasonable limitations, exposing students to relatively greater amounts of academic content correlates positively with achievement gains. This is the much discussed "Opportunity to Learn" (OTL). OTL is different from, but often correlated with Time-on-Task (TOT).

Figure 1.1

A GENERAL COMPENSATORY EDUCATION PROGRAM EFFECTS AND EVALUATION MODEL


Student Achievement Gain and Other Desired Outcomes
Parents QAIT
Compensatory Education QAIT
Regular Class QAIT
Other Programs QAIT
School (MACRO Instructional)
Aggregated Measures of Students' Skills
Compensatory Ed. Program
District
Community
State Laws and Regulations
Federal Laws and Regulations

Regarding instructional quality, Brophy and Good (1986) found replicating support for claims that, in general, student achievement was facilitated by teachers who make frequent presentations and demonstrations, accompanied with enthusiasm; ask clear and appropriate questions; provide clear feedback; provide guidance after students answer incorrectly; incorporate student comments and interests into lessons; prepare students for assignments; and circulate among students during independent work. However, Brophy (1988) notes that most research on the effects of teachers has focused on achieving knowledge and skill development ("lower level") objectives. He further notes that "process-outcome data say more about the amount than about the quality of instruction associated with student achievement gains. A related point is that these data mostly reflect the differences between (a) the 25 percent or so of teachers who are the least successful in eliciting student achievement gain and (b) all other teachers" (p. 9).

Brophy and Good (1986) found that some research on teaching leads to context-specific conclusions. They note that low-SES or low achieving students often need "more structure from teachers, more active instruction and feedback, more redundancy, and smaller steps with higher success rates" (p. 364).

Similarly, Carroll (1989) noted that research on quality of schooling was the weakest of the confirmatory study sets concerning his model of school learning. Discussions of quality of instruction and materials inherently push against the issues of what should be taught, how to teach it, and how to measure it.

Appropriateness: Appropriateness is concerned with the degree to which the students have the necessary skills and knowledge to learn a new lesson, but have not already mastered the content. The question of appropriateness is, "Is the lesson neither too difficult nor too easy for the individual student?"

One of the advances brought by the Beginning Teacher Evaluation Study (BTES-3; Fisher et al., 1978) was the refinement of the Time-on-Task concept with a specific enhancement: Academic Learning Time (ALT). ALT is students' TOT in which the time is being spent on material at a difficulty level such that the student is achieving a moderate-to-high level of academic success. BTES-3 researchers found that some second grade teachers allocated over three times as many minutes to mathematics as others (50 vs. 15 minutes per day), and that in some math classes the average student was "on-task" 50 percent of the allocated time vs. 90 percent in others. Just as importantly, the researchers found that in some classes students were frequently allowed to flounder with problems considerably beyond their present ability to succeed, while in others students enjoyed high success rates, adequate teacher monitoring, structuring and feedback. In the high TOT, high success (e.g., high ALT) classes, students were much more likely to be able to effectively address the academic challenges presented by the curriculum. As both Carroll's and Slavin's models would predict, time *plus* appropriate difficulty level (ALT) has been found to be a better predictor of student achievement gain than TOT alone.

However, Slavin (1987) notes that achieving the instructionally appropriate content for all children is not easy:

> Perhaps the most difficult problem of classroom organization is dealing with the fact that students come into class with different levels of knowledge, skills and learning rate, and motivation.... Teaching a class of 20 to 40 students is fundamentally different from one-to-one tutoring because of the inevitability of student-to-student differences that affect the success of instruction. Teachers can always be sure that if they teach one lesson to the whole class, some students will learn the material more quickly than others. Some students may not learn the lesson at all because they lack important prerequisite skills or are not given adequate time. A [further] problem...is that within-class solutions to the problems listed above, such as individualized instruction and grouping, often create new generations of problems: how to manage 30 individualized programs? (p. 94)

Incentive is concerned with the degree to which the students are motivated to work on instructional tasks and to learn the material being presented.

Most writers on the subject of motivation work within social learning theory and within the expectancy X value theory of Feather (1982). Within this framework Brophy (1987) notes four preconditions for motivating students: a supportive environment, appropriate levels of challenge and difficulty, meaningful learning objectives, and moderation in the use of any one incentive or motivational strategy. For teachers meeting those preconditions, Brophy recommends a variety of practical methods for sustaining both extrinsic and intrinsic student motivations to learn. He finds that teachers can model motivation to learn; communicate desirable expectations and attributions; minimize students' performance anxiety; project intensity and enthusiasm; induce interest in or appreciation for the task; induce curiosity or suspense; induce dissonance or cognitive conflict; make abstract content more personal, concrete, or familiar; induce students to generate their own motivation to learn; state learning objectives and provide advance organizers; provide informative feedback; and model task-related thinking and problem solving. Brophy (1987) provides a cautionary note which, in the context of the current model, links incentive structures to appropriateness by noting that "teachers confronted with classes of 20-40 students cannot meet each individual student's needs optimally, so many students are frequently bored and many others are confused or frustrated" (p. 202).

Mac Iver has attempted to simultaneously deal with both the problems of varying levels of academic appropriateness and incentives by designing a coordinated, student level system of school rewards and recognitions. Early results (e.g., Mac Iver, 1991) have indicated improvements among middle school students' perceptions of the intrinsic value of subject matter, effort, and grades.

Time: The amount of time available for regular classroom learning depends largely on three factors. The first, amount of time scheduled for a specific field of instruction, is often beyond the control of individual teachers, but can certainly be influenced by the school, the district, or the nation. Almost all U.S. students go to school 5.5-6.5 hours per day, 176-184 days per year. Japanese students attend school

240 days per year; 50 percent attend "Juku" or "cram schools" in the evenings. The second factor is the amount of time actually used by the teacher to teach. The Beginning Teacher Evaluation Study (BTES-3, Fisher et al., 1978) indicated that some U.S. teachers spend over twice as much class time on academic tasks as others. A third factor is whether or not teachers are able to get students to attend to instruction. It makes no difference how effectively a teacher teaches if students are not attending to academic content.

Time-On-Task ("TOT") has been studied so often and with such replicating results that its value is very nearly assumed. Both common sense and a variety of studies (e.g., Anderson et al., 1989; Brophy & Good, 1986; Fisher et al., 1980; Rosenshine & Stevens, 1986; Stallings, 1980) indicate that, all other things being equal and within reasonable limits, increased time spent attempting to learn a subject is a positive predictor of student achievement gain. As Carroll (1989) has noted, time to learn has been the aspect of his model of school learning which has been most often studied and most solidly verified.

Slavin's model assumes that the rate of student learning increases when events in a student's world serve to increase QAIT. The roles of parents, regular teachers, and other special/categorical programs such as Chapter 1 in increasing components of QAIT are detailed below.

As with Carroll's model, the most important characteristic of Slavin's QAIT model is that all four elements must be adequate for instruction to be effective. Effective instruction is not just good teaching, or time, or motivation. No matter how high the quality of general classroom instruction, individual students will not learn a lesson if they lack the necessary prior skills or information, if they lack motivation, or if they lack the time they need to learn the lesson. Similarly, if the quality of curriculum and instruction are low, then it makes little difference how much students already know, how motivated they are, or how much time they have.

QAIT in the lives of adults working to educate children

The combination of high quality instruction, delivered at the appropriate instructional level for individual students, presented in combination with sufficient incentives so that students will endeavor to learn, and allowing adequate time for student learning almost never happens by chance. Rather QAIT is the product of concerted, often coordinated actions on the parts of adults. There are several groups of adults who regularly interact with disadvantaged children. These include parents, regular classroom teachers, and Chapter 1 and other special program teachers and/or aides.

Parents. Parents have great potential to affect children's school-related learning. During the last quarter century, research has repeatedly found that students benefit from family contexts and activities that emphasize and encourage school-relevant learning (Coleman, et al., 1966; Epstein & McPartland, 1979; Marjoribanks, 1980). Hansen (1969) and Krus and Ruben (1974) found that home reading environment was a better predictor of students' attitudes toward reading than was parents' socioeconomic status (SES). Chilman (1973), Horowitz and Paden (1973), Wigfield and Asher (1984), and Epstein (1989, 1991)

have produced reviews of research indicating that programs involving low-SES parents in their children's educations have resulted in somewhat higher academic performance by students.

By spending time reading with or tutoring a child, by structuring home time so that students complete their homework, and by going over homework with their children, parents can significantly increase the amount of high quality time students spend learning academically related material. By encouraging their children, and by modeling a joy of learning, parents increase students' incentive to learn. By working with the school and their children's teachers, parents can increase the appropriateness of instruction that children receive at school and at home. Teachers may be able to encourage or assist parents in taking on these roles.

Regular Classroom Teachers. Between the ages of 5 and 18, the great majority of children spend more academically-related time with classroom teachers than with all other academically influential sources combined. The QAIT discussion above included activities regular classroom teachers could undertake to maximize the quality, appropriateness, incentives, and time available to students. In a class of 20-40 students, for any of those variables to come into play, the teacher must have considerable skills in classroom management, maintain a clear set of roles, cover content aggressively, hold high expectations, teach actively, and allocate as much of the school day as is practical to academic content. (See Brophy & Good, 1986; Rosenshine & Stevens, 1986).

Special Programs. Virtually every school in the U.S. receives services through one or more categorical or special programs. The diversity of program types, delivery mechanisms, and levels of involvement with regular programs can hardly be exaggerated. Special education, compensatory, gifted and talented, migrant, bilingual education and other programs may have either direct or indirect effects on the Quality, Appropriateness, levels of Incentive, and Time students devote to academically related topics. A student in one or more additional programs, such as a summer migrant education program, might receive direct additions to his or her QAIT. Indirectly, a student not receiving special services may receive marginally increased teacher attention as a result of special programs pulling other students out of regular classes for parts of the school day, thereby reducing student-teacher ratios and increasing the homogeneity of the remaining instructional group.

Chapter 1 Instruction. Federally funded compensatory education instruction may be delivered by a teacher with advanced training in her area of specialization, an instructional aide, or a microcomputer. It may be delivered in the student's regular classroom, in the hall outside the regular classroom, in a computer lab, or in a special Chapter 1 classroom. Variation in delivery location, medium, and quality are three of the key differences among local Chapter 1 programs.

Two additional elements are that Chapter 1 provides diagnostic testing in the basic skills beyond that received by most students, and Chapter 1 instruction is typically delivered in small groups. The diagnostic testing could be expected to increase the appropriateness of instruction. The use of small groups may contribute to quality, appropriateness, and incentive, at least for the 15-60 minutes per day that the average Chapter 1 child receives compensatory instruction. Through careful coordination, Chapter 1 may increase QAIT throughout the students' days. In the cases of before- and after-school and summer programs, Chapter 1 directly increases student learning time.

Because the Chapter 1 teachers or aides typically have additional knowledge of students' strengths and weaknesses, yet work with them for only an average of one half hour per school day, their impact is bounded by the extent to which they successfully coordinate their services with those of the regular classroom teachers each year, across the students' careers within a school, and with parents (Winfield, 1987).

Level 3: The school

There is increasing evidence that schools make a difference in students' educations beyond the influence of student backgrounds and of teacher effects (see Good & Brophy, 1986; Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988; Teddlie, Kirby, and Stringfield, 1989). Raudenbush and Bryk (1986) found that considerable outcome variance in the Sustaining Effects Study (Carter, 1984) could be efficiently explained as school effects. This was especially true of mathematics gains, where 80 percent of three year achievement gains could be attributed to school-level factors.

Very few students learn reading or mathematics at the principal's knee. Students learn at school, but schools don't teach. Rather, principals and school organizations achieve effects managerially and organizationally.

Stringfield and Teddlie (1991), in analyzing data from a set of 16 longitudinal case studies from the Louisiana School Effectiveness Study (LSES), found that while some schools were successful in becoming and remaining exemplars on some dimensions of schooling without active principal support, in general, the goals and actions of the principal eventually became synonymous with "school culture." This school culture or ethos is a created, understandable, and changeable phenomenon. Five broad categories of schools' ethos are measurable: *M*eaningful, universally understood goals; *A*ttention to daily academic functioning in all classes; *C*oordination of curricula and instruction across classes, programs, and grades; *R*ecruitment and development of staff, including moving non-performing staff out of the school; and efficient *O*rganizing of school functioning to achieve the daily activities and overall goals of the school. These functions can be abbreviated as MACRO.

The choice of the acronym MACRO to describe the school effects variables is intentional. The authors' goal is to reinforce the premise that schools and programs do not teach. Parents, teachers, and para-professionals teach. Schools and programs can facilitate teaching and, as such, can operate at a MACRO-instructional level.

Meaningful, universally understood goals. Reviewers of the school effects field from Edmonds (1979) to the present have focused on "clear goals and objectives" as a characteristic of more effective schools. In the Louisiana School Effectiveness Study (LSES), Stringfield and Teddlie (1991) found that, in its simplest form, this characteristic has become not true, but a truism. Many schools now have clearly posted "goals." These may or not be addressed, or even known, by the majority of staff. Clearly stated goals that are not acted upon do not convey meaning to teachers or to students as learners.

In some LSES schools, detailed interviews with principals and staff produced a reasonably unified sense of the academic purposes of the school. In other schools, everything—academics, social development, sports, cleanliness, having fun—were all "most important." To declare everything to be most important is to give no long-term importance to anything. Meaningful goals imply priorities and provide guidance when tough choices must be made. Some schools have them. Meaningful goals will be shared by all staff and often known by students.

One of the many ways through which goal statements acquire meaning is through school-level recognition and rewards. A frequently referenced article in the field of personnel management provides many examples of "the folly of rewarding for A while hoping for B" (Kerr, 1975). Students and teachers view as real and important activities or accomplishments which are rewarded in their school.

Attention to daily academic functioning. "Management by Walking Around (MBWA)," coined by Peters and Waterman (1982), applies to school effectiveness as much as to "best run companies." By seeing every teacher every day, and by visiting all classrooms for extended periods each year, a school administrator can observe differences in quality of instruction from class to class, identify areas in which teachers need to improve their skills, and identify disparities in appropriate levels of instruction for all students. These needs are seen most clearly by sitting in classes. Disjunctures in curricula—rarely apparent on paper but often plainly visible in practice—are made clear by visiting classes and by "shadowing" a student through parts of his/her school day. QAIT is an all day issue.

Coordination among programs and between school and parents over time. It is the organizational task of the principal, plus any persons or teams he may appoint, to arrange school days, years, curricula, and programs so that students can extract academic meaning across events. Schools which strive to achieve thoughtful cross-program cross-grade coordination are almost invariably more effective (Mortimore et al., 1988; Stringfield & Teddlie, 1991.) Reynolds and Creemers (1991) expand on the issue of coordination by adding differentiation among coordination, consistency, constancy, and cohesion. The common theme across these variables is that administrators and teachers attend to the children's' academic days so that students are able to make academic sense of their school days and years.

Recruiting teachers, staff development, and moving longitudinally unsuccessful teachers out. Stringfield and Teddlie (1991) found that principals of more effective schools took teacher recruitment very seriously, while principals of much less effective schools "saw recruitment as completely beyond their control" (p. 369). Teacher recruitment is critical.

Similarly, staff development can make a great difference in the instruction received by students. Properly targeted staff development can affect teachers throughout their careers, but has its greatest impact during the induction of new teachers, at the introduction of new programs into a school, and during attempts to revive a "burnt out" or incompetent teacher.

The state of teacher induction programs is far below optimal. Most U.S. school districts simply provide new teachers with one or two days of lectures regarding local health care benefits, a discussion of the tenure system, and one to three inspirational speakers. Research by Ward and Tikunoff (1989) and Kirby, Stringfield, Teddlie, and Wimpelberg (1991) indicates that school level support is critical to the success of any induction program, however structured at the district or state levels.

Research on teacher change indicates that teachers are more likely to change behaviors if they are not made to feel defensive about their current behavior patterns, and if they receive theory, demonstrations, time to practice, and ready feedback (e.g., Showers, Joyce & Bennett, 1987). Unfortunately, those conditions are rarely realized. An optimal moment for providing that level of change-inducing assistance to teachers is during the introduction of a new "program."

An additional opportunity to use staff development involves attempts to salvage the careers of "burnt out" or incompetent teachers. Informing a teacher that he or she has been placed on probation due to inadequate teaching performance may produce a genuine attempt on the part of that teacher to modify his or her behavior. Unfortunately, Bridges (1986) documents the general lack of training of administrators at any level for adequately diagnosing teachers' problems or introducing effective interventions from the training options that currently exist. Bridges described research on salvaging burnt out or incompetent teachers as "an intellectual Sahara" and noted that most salvage efforts resulted in at best marginal improvements in teachers' performance. This is a huge loss of potential opportunity to improve the QAIT of instruction provided to students.

Bridges (1986) found greater success in another area: removing incompetent teachers from schools. Properly conducted efforts to remove incompetent teachers have been supported by the courts.

A series of studies involving interviews with principals (Stringfield & Yoder, 1992; Winfield, 1991; Stringfield & Teddlie, 1991) indicate that principals who have built highly effective schools have almost invariably felt the need to move several teachers and other employees out of their schools. This has typically not been a task about which the principals have bragged, but rather something they were willing to discuss quietly on a second or third interview. In the U.S. it is almost always easier to transfer than to fire a teacher who has been placed on probation; this is often the course taken.

Organization of the school to support universal student learning. The overall school organization needs to be structured to achieve the above objectives and other organizational requirements. The organizational structure must become effective without exhausting the physical and psychological energies of the principal, teachers, and staff. An effective organizational structure must meet the long term needs of both children and adults in order to sustain effectiveness.

Within the school, in order to establish and maintain meaningful, universally understood goals, a principal must elicit ideas from the staff, generate goals, elicit support for the goals, evolve a system of symbols and changing rewards relative to the goals, and regularly refine the goals and re-elicit support. In order to attend to daily academic functioning, a principal must visit classrooms, talk with teachers, form, participate in, and support various curriculum groups, monitor the progress of at risk children, monitor the progress of new teachers and new programs, arrange for and monitor substitute teachers.

To establish and maintain successful levels of coordination among programs providing services to student-learners, a principal must structure the school day and year so that students' movements among programs are not unduly disruptive *from the students' perspectives*, structure teachers' schedules so that regular teachers within grades are able to examine their curricula, provide the maximum quality, appropriateness, incentive structure for the maximum amount of time to their students, and do so in such a way that all students are prepared for the next year's curricula; structure the schedules of regular and various "special" teachers so the programs and their curricula are coordinated at the adult, as well as child, levels; and finally, the principal and staff must coordinate actual curricula across grades.

In order to recruit, develop, monitor and, as necessary, move teachers, principals must find time for themselves, and often members of their staffs, to examine résumés; interview prospective teachers; monitor progress; choose new programs and new staff development opportunities; provide feedback to teachers implementing new programs or on probation (often including peer coaching); and deal with the large amounts of paperwork and psychological stress associated with managing marginal-to-incompetent teachers.

Haphazard organization, or organization built around one hard worker, can not achieve all of the above for short periods of time, to say nothing of the years of work required to build and sustain a highly effective school. Mortimore et al. (1988) found that an instructionally involved assistant principal often was a feature of more effective London junior schools. The principal must also be able to call on his or her teaching staff. Committees of teachers can take on many of the responsibilities often assigned to "the school." Local classroom teachers are in the ideal position to identify and develop areas for curricular enhancement. Teachers should be on committees to choose new colleagues, and can serve as peer mentors as schools take on new curricula and programs.

The principal must be able to call on the district office for specialized support. Modern schools have a plethora of specialized, categorical programs. Modern curricular and instructional theories are constantly evolving. The rules for fiscal accounting are in perpetual flux. A principal needs expert advice and guidance from above, and needs to find methods for using that advice efficiently.

This model proposes no one method for achieving the organizational effectiveness necessary to support effective teaching and high rates of student learning. It simply notes that schools must work within their particular local strengths and limitations to find methods of organizing those systems.

A central assumption of this model is that the provision of *M*eaningful goals, *A*ttention to daily academic functioning, *C*oordination among programs, *R*ecruitment, development, and movement of teachers, and *O*rganizing to sustain all of the above within considerable bureaucracies (MACRO) does not have a *direct* effect on student learning. Students' learning is assumed to be a function of aptitude, ability to understand, perseverance, opportunity, and quality of instruction (Carroll, 1963). Teachers and parents affect those processes by providing high quality instruction at the appropriate difficulty levels and with adequate incentives over sufficient time (QAIT) (Slavin, 1987). MACRO functions serve to enhance the ability of teachers and parents to provide the highest possible QAIT to students over the students' days and elementary years. MACRO functions provide reasonable checks that the publicly paid persons with direct access to students fulfill their duties. Schools do not directly "cause" learning; schools facilitate QAIT.

Figure 1.1 (page 1-10) represents the school as having the potential to support QAIT through all four groups which directly interact with students as learners: the regular classroom teachers, "special" programs, Chapter 1, and parents. Children's education suffers in direct relation to the degree to which one or more of the QAIT groups is dysfunctional. Schools and programs within and across schools can help maximize the functioning of individual service-providing adults and the coordination among them.

Level 4-plus: Groups beyond the school level which may affect QAIT provided to students

Chapter 1 Programs. Some decisions which have potential impact on the rates of at-risk students' academic learning are made at the level of the local administration of categorical programs. At the district, state, and federal levels, efforts to increase student learning typically have focused on providing "extra" programs to compensate for student disadvantage. Chapter 1 can have great relevance to the overall effectiveness of the school. First, it can improve the academic functioning of students who are in danger of falling behind. Usually, it does this by working with individual or small groups of students on fixed topics for extended periods of time. In Figure 1.1, these programs could be thought of as providing high *Q*uality instruction at the *A*ppropriate difficulty level (the probability of both presumed to be increased by small group size). The traditional trade-off is reduced *T*ime in the regular class. On occasion an unintended consequence of these programs is the loss of feeling of connectedness and responsibility on the part of the regular teacher (thus reducing *Q*uality, *A*ppropriateness, and *I*ncentive for the majority of the school *T*ime). Within the Chapter 1 program, many QAIT-relevant options are available to the district and school. These include content area(s) of service, grades of service, criteria for receiving service, service delivery mode (teachers? aides? computers? provided in class? in a "pullout"? in a whole school?), methods of selecting, training, and retaining staff, methods of coordination with regular programs, and measures of success.

As previously noted, Chapter 1 and other categorical programs can be structured in a multitude of configurations. The Special Strategies studies hypothesize that many different combinations of decisions and configurations of instruction and schooling can be effective, as long as the operative configuration is (a) instructionally sound when considering the needs of individual students, (b) sensitive to local conditions, and (c) coordinated with regular instruction, other programs, the larger school curriculum, and parents.

Some components of Chapter 1 service may be more educationally important than others. Meaningful coordination of the full day of a student's academic time may prove more important than micro-behaviors of teachers during Chapter 1 instruction, for example. District-level program efforts which focus on maximizing coordination between special programs and regular instruction, and between program specific and regular instructors, would prove effective.

The second implication is that generally more effective models of categorical programs might be differentially effective in various contexts. Both research on teaching (e.g., Brophy, 1988) and schooling (Hallinger & Murphy, 1986; Teddlie et al., 1989) have found that many "effect" variables are context specific. The same is likely to be true of categorical program components and whole programs.

Community. A community plays a powerful role in shaping a school district, its schools, and its special programs. Chrispeels and Pollack (1989) found that in upper-middle class communities, such "school effects" variables as a "safe and orderly environment" and "parent involvement" were so embedded in the community that the school resources were freed to deal with curricular and instructional issues. In less affluent contexts, schools had to address those issues through the direct allocation of scarce resources.

Community, therefore, tends to set the parameters for contextual considerations in understanding affectors of school effects (Wimpelberg, Teddlie, & Stringfield, 1989; Stringfield & Teddlie, 1988, 1991). For a school and Chapter 1 to obtain greater achievement gain from students, they must adapt to the context in which they function. If highly skilled prospective teachers flock to the principal's door whenever an opening occurs in a school, if dozens of well-educated parents regularly volunteer to work in the school at no cost to the district, or if university faculty and students regularly bring their services to the school at minimal or no charge, then many of the options available to a principal can be exercised easily and effectively. The principal's major tasks might then include facilitating the commerce among community, school, and various programs—screening from among highly qualified, motivated applicants the best faculty; facilitating the work of energetic committees based on such faculty-generated concerns as the integration of reading, writing and thinking far above the levels mandated by the district or state; and coordinating parent/community efforts to raise money for a schoolwide computer lab.

In contrast, when vacancies on the school faculty remain unfilled and even unsought because the school has a bad reputation and is located in a dangerous urban or isolated rural area; when parents are poor, illiterate or suffering from drug addiction and have powerfully negative associations with their own all too recent schooling experiences; when the most frequent problems facing principals include taking guns, knives, and drugs away from students; when district office staff employees actively avoid visiting the school; and when newspapers publish test-score based rankings of schools which regularly show the school near the bottom on achievement, a school's routes to relative "school effectiveness" are greatly constrained. In this less affluent, less fortunate scenario, a principal often spends years searching for technically qualified staff, for methods to keep drug dealers out of the halls, and for enough basal texts that all of the children have a book to read. The tasks of implementing mandated curricula, trying to stop the "forced transfer" of manifestly incompetent teachers into the building, holding on to the most competent staff, and coordinating candy sales so that all children can have paper are eternally demanding. Together with the district, community is one of the two most powerful higher level variables facing a school.

School District. In the U.S., most schooling-related functions are relegated to states, which in turn delegate most responsibilities to Local Education Authorities (LEAs). There are over 16,000 LEAs in the U.S. Five have over one-half million students within their service boundaries. Thousands have under 1,000, and some have more members on their locally elected boards than they have instructional employees.

LEAs typically make text choices and occasionally prescribe exact rates of progress to be made through those texts. Courts and elected officials are more likely to hold districts than individual schools responsible for service provision. Budgets are typically controlled at the district level by elected school boards and their appointed managers.

In many states, districts have taxing authority. The result is a 300+ percent variance among districts within some states in mean per pupil educational expenditure. Within other states, district level per pupil expenditure varies by under 30 percent. Per pupil expenditure levels vary *among* states by nearly 100 percent.

Typically, districts serve as gatekeepers for all personnel decisions in their schools. Some districts offer individual schools great latitude for programming, and others mandate very specific curricula, programs, and procedures.

Almost all federally and state mandated/funded programs are managed through LEAs.

Federal and state government

The U.S. Constitution is generally interpreted as giving responsibility for schooling to the states. Hawaii and the District of Columbia provide 100 percent of the funding for schools at the state level. Other states provide less than 40 percent. Some states mandate specific texts, and some mandate specific courses students must take for high school graduation. All states mandate specific teacher certification criteria, and some mandate specific teacher evaluation criteria.

The clearest example of federal involvement in U.S. education is in the area of education for disadvantaged students. Chapter 1 programs exist as a result of federal laws and funding. Changes in state and federal laws, regulations, and actions can constrain or facilitate specific types of local programs which, in turn, affect the quality, appropriateness, incentive, and time of students' academic instruction. The Hawkins-Stafford Amendments of 1988 provide dramatic evidence of the potential of the federal government to create new options for the use of Chapter 1 funds.

State laws and regulations, and states' interpretation and focusing of federal statutes provide similar opportunities to observe variation in policies and their implementation. Figure 1.1 reflects the fundamental roles of the federal and state governments in providing compensatory education.

In summary, the Special Strategies studies begin with a model of Chapter 1 effects. The model assumes that students learn in direct proportion to the quality, appropriateness, incentives, and time (QAIT) provided at home, in regular classrooms, and in Chapter 1 instruction. It further assumes that programs and schools can provide teachers with structure and assistance which can increase QAIT. This guidance takes the form of meaningful goals, attention to daily academic functioning, coordination among classes and programs, the recruitment, training, retention and replacement of teachers, and the provision of an organizational structure in which all of the above become possible. These school level variables may be thought of as "MACRO-instructional."

The role of "programs" in the Chapter 1 effects model

Within the above model, various *programs* may work with greater or lesser success. A detailed discussion of the specific programs involved in the Special Strategies studies will be provided in Chapter Two. In this introductory chapter, the programs being studied will be briefly described and differences among them noted, but only the important first distinction among programs will be discussed in detail.

The programs were chosen to meet a set of categories listed in the Special Strategies Request for Proposals. While any one program could have a broad or very narrow focus, collectively the set of programs to be studied were to include schoolwide projects, curricular innovation, and extended time programs (extended day or extended year). The urban, suburban and rural programs were to include at least two of the following strategies: parent involvement, technical innovation, peer/adult tutoring, and integrated services. Finally, each contract would have at least one of the following program types: bilingual, migrant, Native American, or Chapter 1 preschool. Within each contract, sites selected were to include programs serving primary grades, upper-elementary/middle grades, and secondary grades.

The specific program types chosen for study in Special Strategies are listed in Figure 1.2 on page 1-24. The list is not intended to be inclusive of all interesting and worthy innovations currently serving Chapter 1 eligible children. Rather it is a sample of interesting innovations which meet the sampling criteria.

Programs may vary along many dimensions. Identification of key problems, desired outcomes, and a wide variety of process dimensions can all provide interesting sources of differentiation. For the first year report, the Special Strategies research team has divided the programs in Figure 1.2 into three basic categories: (1) programs which may be implemented in the whole school or in "schools within schools" as contrasted with purely academic orientations, (2) programs which are implemented schoolwide, and (3) programs which are adjunct to schools' core curricula .

A first set of programs will be discussed as "Philosophical Approaches." These include Paideia schools (Adler, 1982), Coalition for Essential Schools (CES) projects (Sizer, 1984), Re: Learning schools which derive from the Education Commission of the States efforts to support CES schools "from the statehouse to the schoolhouse," and schools following James Comer's School Development Model. CES schools attempt to achieve broader and deeper learning through a restructuring of whole schools or the creation of "schools within schools." Paideia schools restructure the school's use of time and orientation to curricula.

Like Success for All, the Comer School Development Model was not easily categorized. The goals of the Comer model are varied and reflect the developer's deep grounding in community psychiatry. Like CES, the Comer model specifies a set of desired outcomes and a set of school-level processes to be followed to reach those outcomes. Also like CES, the model assumes local educators will, as a result of

Figure 1.2

TYPES OF SPECIAL STRATEGIES[1]

Philosophical Approach	Chapter 1 Schoolwide Project	Adjunct Program to Core Curriculum
• Re: Learning/ Coalition of Essential Schools—Sizer Schools (5)	• Schoolwide Projects (4)	• Reading Recovery (2)
• Paideia Schools (2)	• Extended-year Schoolwide Projects (2)	• Computer-assisted Instruction (2)
• Comer Schools (2)		• Tutoring (2)
		• Extended Day/Extended Year (2)
	← • Success for All (2) →	

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[1] The number of schools implementing each strategy is noted in parentheses. For example, Re Learning/Coalition of Essential Schools has five sites.

following the general process, adapt their curricula and instructional processes in the ways which will be most appropriate for local children's needs.

From the perspective of the model of Chapter 1 previously described, the philosophical approaches tend to more nearly resemble schoolwide projects. The primary difference is that schoolwide projects are often descriptive regarding curricula and instructional practices, whereas the philosophical approaches are descriptive regarding an approach to education and to problem solving, and assume that the larger process will lead to locally appropriate curricula and instruction.

A contrast is provided by programs intended to operate as schoolwide projects. The Hawkins-Stafford Amendments allow schools serving over 75 percent economically disadvantaged students to use Chapter 1 funds throughout the school, as long as the school accepts additional evaluation requirements. In many sites, a schoolwide project simply eliminates all Chapter 1 pullout programs, and works as a whole school to achieve improved student achievement. Conceptually, this is shown in Figure 1.3 on page 1-26. Schoolwide projects were directly facilitated by a change in federal law that allowed state Chapter 1 coordinators, working with local Chapter 1 programs and occasionally with regional Technical Assistance Centers and specific program developers, to work directly with local schools to develop specific programs. Those school-specific schoolwide proposals use Chapter 1 funds to improve overall service delivery. They often include specific proposals to include high levels of coordination with other educational programs which operate within the school, such as migrant, bilingual, and special education. For a schoolwide project to be meaningful to the entire faculty, and not just a few isolated professionals, the larger faculty must become involved in the implementation.

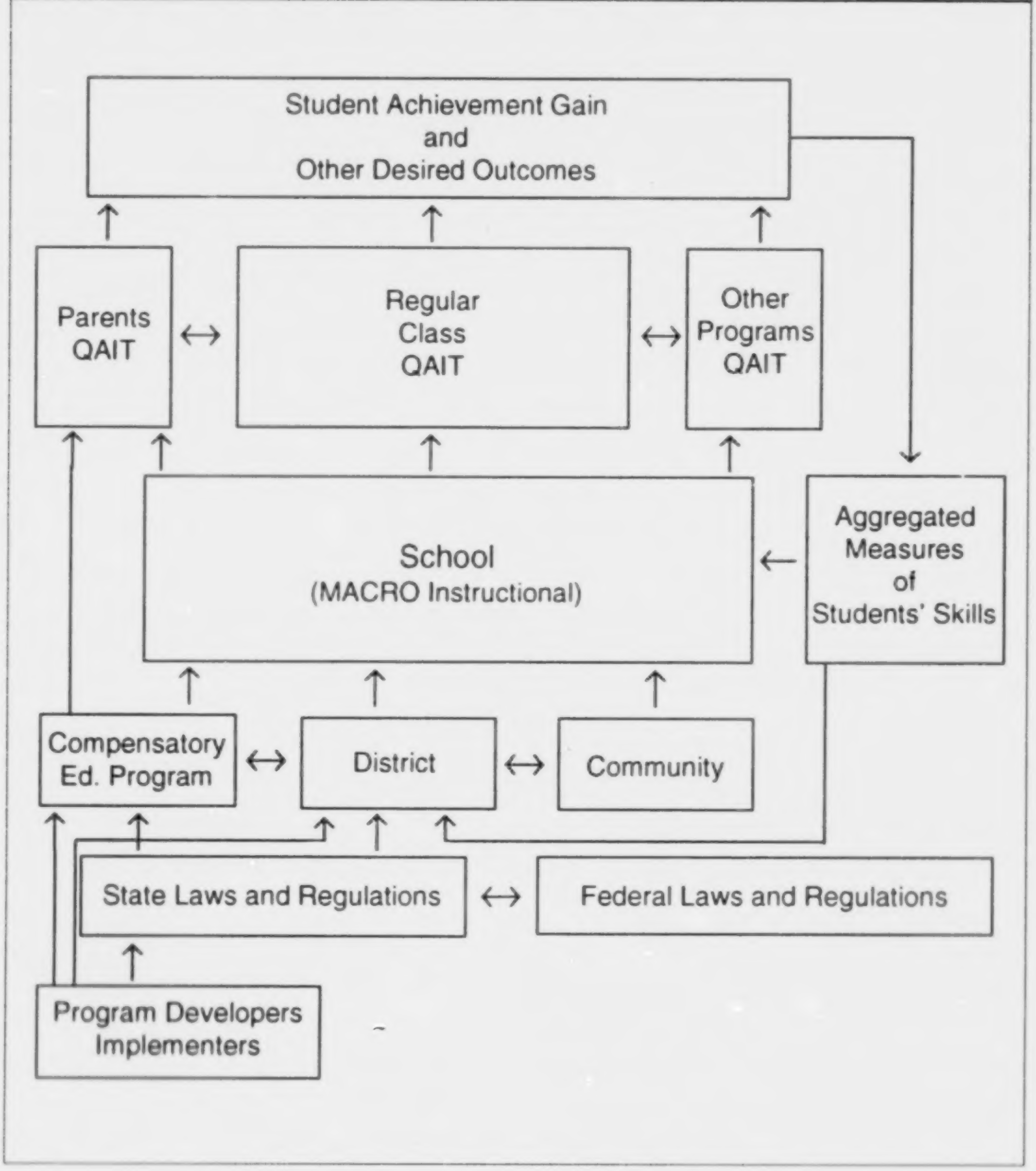
In the Special Strategies studies, several types of schoolwide projects are being studied. The two suburban/rural schoolwide projects are relatively "pure" examples of the program. That is, both schools eliminated all compensatory education pullouts, decreased class size, and increased expenditures on materials and staff training. The two urban schoolwide projects undertook more complicated configurations. Both greatly reduced pullouts, but kept tutoring or small group assistance for the students who were furthest behind academically. Both used some of their Chapter 1 funds to place a full-time curriculum specialist/program implementation facilitator in the building.

The urban extended-year schoolwide projects have many of the features of the urban schoolwide sites, but were able to acquire additional funds through court ordered desegregation agreements and other sources. As a result, the sites offer enhanced schoolwide services and extended-year programs.

Success for All was one of the two most difficult programs to categorize within the current system. Success for All is clearly a schoolwide project; yet, it contains a pre-kindergarten program, a highly prescriptive curriculum, one-to-one tutoring for first graders who are falling behind, and other "adjunct" features. It is classified as a schoolwide project because it contains more schoolwide than adjunct features.

Figure 1.3

A SCHOOLWIDE SPECIAL STRATEGY
PROGRAM EFFECTS AND EVALUATION MODEL


Student Achievement Gain and Other Desired Outcomes
Parents QAIT
Regular Class QAIT
Other Programs QAIT
School (MACRO Instructional)
Aggregated Measures of Students' Skills
Compensatory Ed. Program
District
Community
State Laws and Regulations
Federal Laws and Regulations
Program Developers Implementers

As can be seen in Figure 1.2, four of the special strategies are most often implemented as adjuncts to schools' core curricula. These include Reading Recovery, an intensive first grade pullout program; Computer Curriculum Corporation's computer assisted instruction program; METRA and cross-age peer tutoring as examples of relatively inexpensive one-on-one interventions; and extended day/extended year programs. It is possible for any of the above to have an impact on a school's core curriculum, but it is also possible to operate any of them in relative isolation. As will be noted in Chapter Two, examples of greater and lesser levels of connectedness with the core were found in the sites of all four adjunct programs.

When viewed from the perspective of the Chapter 1 Effects model, all four adjunct program types have a common route to effectiveness. This is represented in Figure 1.4 on page 1-28. In almost every case these programs were developed outside the school systems which are implementing them. Reading Recovery, for example, was developed in New Zealand. Once a local district has chosen a specific program, they implement it through their Chapter 1 or compensatory education office at the district level.

The programs may or may not involve school-level participation in program choice or implementation strategy. A district can choose to adopt CCC or Reading Recovery, and schools may have little voice in that choice. Indeed, one state legislature has mandated Reading Recovery. Equally often, a principal may enthusiastically seek out a new program, implement it, and then move to a different school or position within a district. The following principal may have no knowledge of or commitment to the program. Moreover, some adjunct programs require little to no school involvement beyond scheduling consideration. All of these programs operate at some sites in which the principal and regular classroom teachers have minimal knowledge of the specific working of the programs. The programs are able to function without the active support of regular staff.

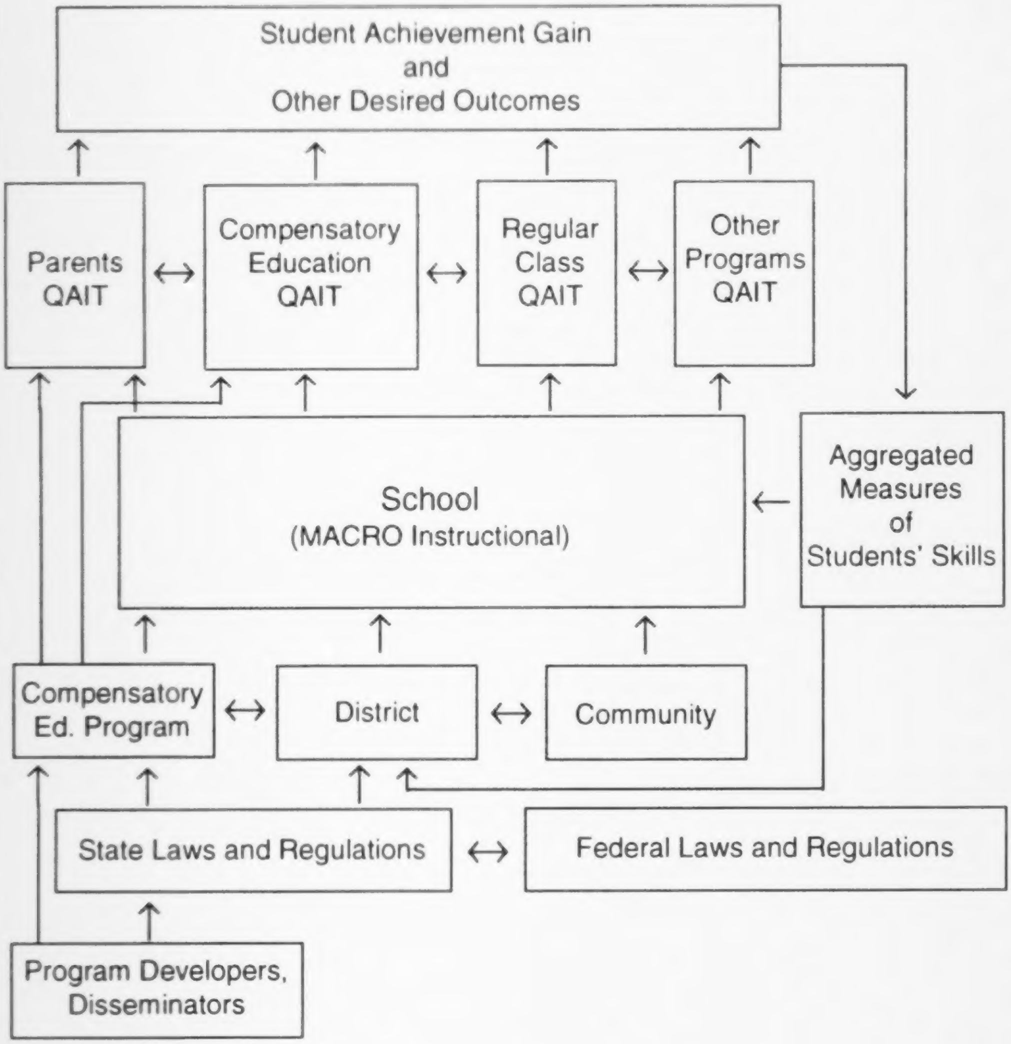
Sample

The core sample of special strategies programs listed in Figure 1.2 consists of six special strategies serving urban students, and six special strategies for suburban/rural students. Both schoolwide and CES schools are being followed in both urban and suburban/rural contracts, resulting in a total of 10 program types. For each program type, there is a focus on students in a particular grade.

The site selection process was purposeful rather than random. Sites were selected because they were purported to be exemplars of the chosen strategies. Although the specific routes through which sites were identified varied, and the range of that variance will be described below, the common theme was nomination by persons regarded as expert within the specific program type. In most cases, after a program specialist had nominated a school, the state and local Chapter 1 directors were asked to verify the exemplary status of the school's program. Examples of persons deemed "expert within the specific

Figure 1.4

AN ADJUNCT SPECIAL STRATEGY
PROGRAM EFFECTS AND EVALUATION MODEL


Student Achievement Gain and Other Desired Outcomes
Parents QAIT
Compensatory Education QAIT
Regular Class QAIT
Other Programs QAIT
School (MACRO Instructional)
Aggregated Measures of Students' Skills
Compensatory Ed. Program
District
Community
State Laws and Regulations
Federal Laws and Regulations
Program Developers, Disseminators

program type" included an assistant to Dr. James Comer at the Yale Child Study Center (Comer model), Dr. Robert Slavin (Success for All), the assistant to the president of the Computer Curriculum Corporation (CCC computer-assisted instruction), senior specialists from regional Chapter 1 Technical Assistance Centers (Schoolwide projects), and principal research scientists at the Education Commission of the States and at The Johns Hopkins' Center for Research on Effective Schooling for Disadvantaged Students (CDS) for Coalition for Essential Schools (Sizer) and Re:Learning. In the rare instances in which state Chapter 1 coordinators expressed doubt as to the exemplary status of particular schools' programs, the sites were dropped and other sites identified. However, Special Strategies researchers were unable to gain confirmations or disclaimers on all sites before the studies began.

It is worth noting that the fields of teacher- and school-effects research made only modest progress so long as they relied on reputational nominations for determinations of exemplary status. Moving into our second year of data gathering at the Special Strategies sites, it is not clear that all of the nominated sites ever have been instructionally exemplary within their program types. This natural variation is both a strength and weakness of the sample, depending on the question being addressed. It is a strength regarding questions of implementation. It is a weakness when attempting to address questions of generalizable program effects.

The Hopkins/Abt proposal called for studying cohorts of students in two schools of each type. In one case the sample was expanded to three schools out of concern that a district desegregation settlement might eliminate the program during year one of the study. This resulted in a 25-school core sample.

The grade of the cohort identified for each program is shown in Figure 1.5 on page 1-31. Each school's cohort is being followed over a three year period beginning in the fall of 1990.

Figure 1.6 on page 1-32 graphically indicates that the sites are drawn from across the country. Sites range from near the Mexican to near the Canadian borders, from the West to the East Coasts, from the "rust belt" to the "sun belt." Sites are located in all four mainland time zones. The sample includes schools in which the majority of students are of Native American, Hispanic, African, Asian, and European origins.

In addition to the above sample, the design calls for visiting four replication sites for each of the first grade programs. Following Lincoln and Guba (1982), Miles and Huberman (1984), and Yin (1989), replication sites were chosen as a method for gaining some evidence of the generalizability of findings from the two primary sites of half of the programs. The purposes of the replicates are twofold. First, in the frequent cases in which levels of implementation vary across the two primary sites for each program, replicates can inform the study as to the potential for full implementation of a program. Second, replicates can provide powerful, low additional cost data on varied contextual variables which may facilitate or impede implementation within specific strategy types. Visits to replication sites will be made during the spring and fall of 1992. Selection of the replication sites is underway.

Instruments

Two differing sets of data are being gathered for the Special Strategies studies. Some of the data are being gathered as part of the Prospects national effort. Prospects gathers achievement test (the Comprehensive Test of Basic Skills, Version Four—CTBS-4) scores. Special Strategies gathered CTBS-4 data in the fall of 1990, and Prospects is following the Special Strategies sample each spring through the remainder of the study. Questionnaire data are being gathered from the students (grade three and above), their parents (regardless of grade), their teachers (a changing group each year as the cohorts move forward), their principals, and district Chapter 1 staff. Additionally, Prospects extracts school-relevant data from each student's permanent records, such as grades and absence rates.

In short, Prospects is gathering very large data sets on a large nationally representative sample of students, and is gathering identical data on cohorts of students involved in the Special Strategies studies. This uniformity of data sets will have long-term advantages for Prospects and the Special Strategies studies. Prospects will provide more nearly representative data on quantitative data elements which can be contrasted with Special Strategies. Similarly, Special Strategies will provide some qualitative observations which can inform the quantitative findings of Prospects. The first round of Prospects data is becoming available as this report is being written, and many of the potential cross-walks will be available in the second year Special Strategies report.

A great deal of national attention has been focused on perceived limitations of nationally standardized, multiple choice, norm referenced tests (NRTs). NRTs are central to Prospects. As a check on NRT data, and to strengthen the Special Strategies studies, the cohorts of Special Strategies students are completing more "authentic" test instruments during the 1991-1992 school year. During the fall 1991 semester, all Special Strategies students are providing two writing samples, and the tenth grade cohort is taking the Educational Testing Service's Tests of Applied Literacy Skills, a performance-based measure based on the 1985 National Assessment of Educational Progress.

In addition to the Prospects and Special Strategies outcome data sets, researchers are gathering extensive high- and low-inference case study data at all 25 Special Strategies sites. At the *student* level, this includes qualitative, longitudinal, whole-school-day records of students' in-class academic processes over six field visits. Three students are being "shadowed" at each school. At the end of each day of observation, both the student and his or her parents are interviewed (see parent interview, Appendix A.)

At the *classroom* level, extensive qualitative notes are enhanced by low- and high-inference observational data in the Special Strategies Observation System (SSOS). (For a description and a copy

Figure 1.6

DISTRIBUTION OF SAMPLE SCHOOLS BY PROGRAM TYPE AND GRADE OF PRIMARY FOCUS

Urban Programs	Initial Grade*	Suburban/Rural Programs	Initial Grade*
Extended Year Schoolwide	1	Extended Year/Extended Day	3/1
Schoolwide	3	Schoolwide	3
Coalition of Essential Schools (CES)	9	Re: Learning (CES)	9
Success for All	1	Reading Recovery	1
Paideia	3	METRA/Peer Tutoring	1
Comer	1	Computer Assisted Instruction (CCC)	3

* The Special Strategies studies is following cohorts over three school years, so that the majority of first graders will be in third grade at study's end, third graders will be in fifth grade, and ninth graders in the eleventh grade.

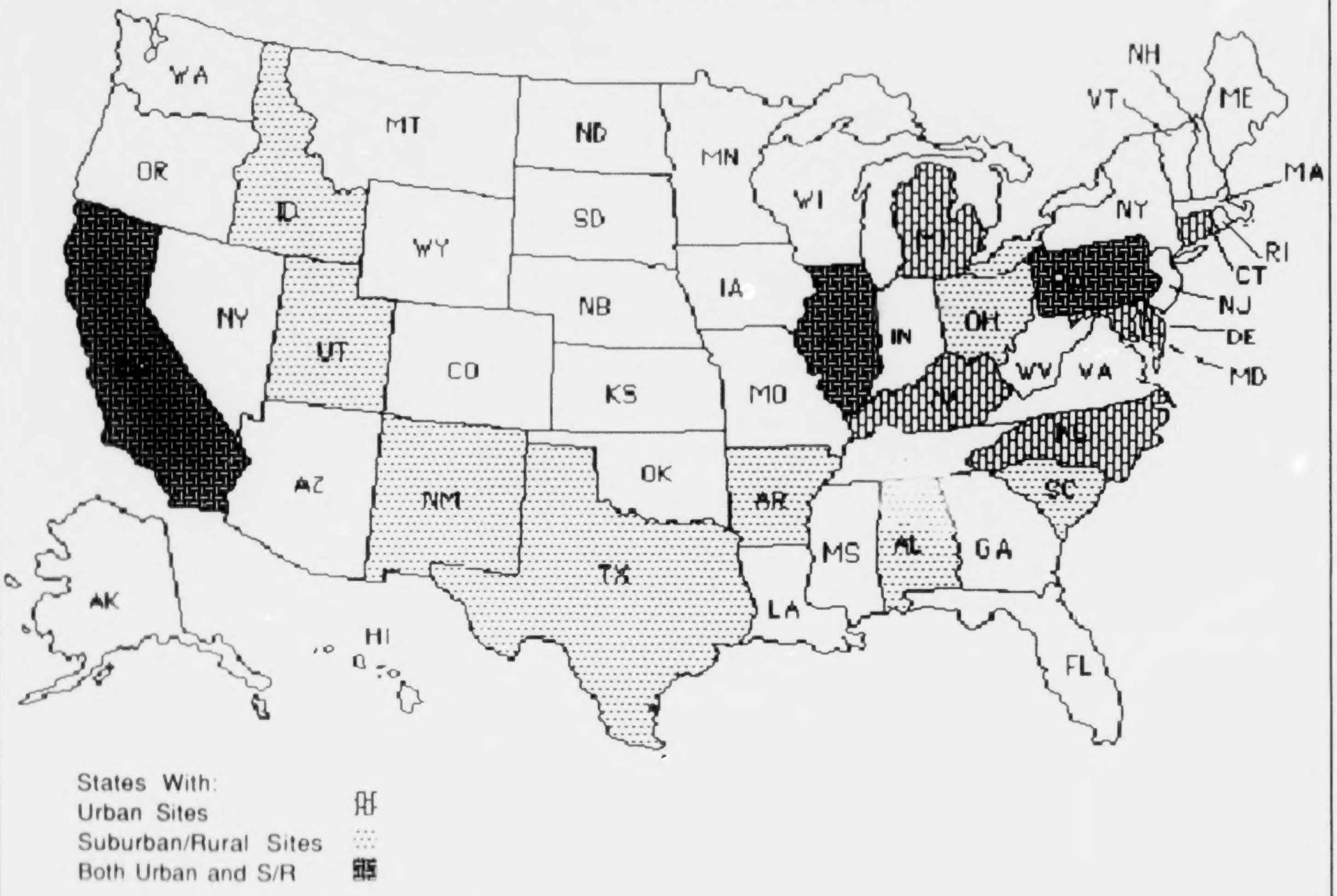
of the SSOS form, see Appendix B.) An example of relatively low inference data would be rates of student engagement. The larger descriptive notes section of the SSOS allows for high levels of observer inference. The SSOS is based on prior work by Evertson and Burry (1989), Slavin (1988), and Stringfield and Teddlie (1991). The SSOS is designed to gather common classroom-process data across sites and programs while also allowing for the emergence of classroom differences among programs. The SSOS uses Slavin's (1988) Quality, Appropriateness, Incentive, and Time (QAIT) model of instruction to explore classroom processes. A minimum of 12 hours of classroom SSOS data are gathered during reading, language arts, and mathematics classes at each site each year. In addition, teacher interviews are conducted each year with a minimum of three grade-specific teachers at each school (see Appendix C).

School-level data focus on principal interviews (see Appendix D), and on integrative, multi-level case studies. The case studies are expanded with each visit, and cover a variety of student, classroom, community, and school specific variables.

Finally, *strategy*-level data are gathered through cross-site, within-strategy comparisons between case studies. These strategy-level analyses will be strengthened during 1992 by the addition of the replication sites. That is, as teams are gathering a second and third year's detailed data on two sites per

Figure 1.6

SPECIAL STRATEGY CASE STUDY SITES BY STATE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NY
RI
CT
NJ
DE
MD
States With:
Urban Sites
Suburban/Rural Sites
Both Urban and S/R

intervention, the lead researcher of each first grade team will be making less in-depth visits to additional implementations of the programs. Adding less than 10 percent to the cost of the studies, these replicate visits will provide a great deal of information relative to the transferability or generalizability of Special Strategies findings.

Procedures

The 25 primary sites have been visited by two-person teams for five days during the late fall/early winter and again for three to four days during the spring of the 1990-91 school year. Two summer programs were visited during the summer of 1991. All sites will be re-visited during the fall and spring of the 1991-92 school year, and two or three target students per school will be followed throughout the study. Sites also will be visited during the 1992-93 school years. CTBS-4 data were gathered by Special Strategies staff during the late fall/early winter 1990-91 visits, and by Prospects staff during spring 1991 visits. CTBS-4 data will be re-gathered on the same cohort of students at each school again during the springs of 1992 and 1993.

A typical three-to-four-day site visit has the following structure. Schedules for formal interviews and for testing or other highly structured data gathering are made prior to arrival. A meeting with the principal is scheduled to begin Day 1. During that meeting, schedules are received, any necessary school-level arrangements are made, and the principal interview is begun. The junior researcher spends the remainder of the day making classroom observations and collecting other school and program-level observations. The senior researcher interviews school and district specialists and observes in classes. The evening of the first day is often spent with teachers and administrators over dinner.

A typical Day 2 has both field team members shadowing students to gather "whole school day" information. After school, parents or guardians are interviewed.

One researcher spends Day 3 shadowing a third child and then interviewing the parents or guardians. The other team member gathers final classroom observations, interviews teachers and administrators, and collects other data at the school and district level. Day 3 ends with an exit interview of the principal.

If circumstances have prevented completion of all data gathering activities during Days 1–3, the junior researcher spends a fourth day at the site.

The organization of the report

The remainder of this first year report is divided into two sections and ten chapters. The next section, including Chapters Two, Three, and Four, describes the Special Strategies as they are being implemented. In both this first year report and in subsequent reports, it is critical to obtain a solid understanding of both the intended and implemented programs. Chapter Two provides descriptions of the various programs as they are envisioned by their developers and short notes on the two sites being visited for each program. Chapter Three focuses on the programs as currently being implemented in classrooms, focusing on classroom interactions. Chapter Four provides first year observations of a three-year effort to unfold and explore the translations of abstract "special strategies" into the lives of students.

The remaining six chapters present data on implementation. Chapter Five examines school and staff supports which appear to be important for various implementations. Chapter Six asks the question, "What is required to get the various strategies off the ground?" Chapter Seven provides our first year understanding of the historical and present roles of staff development in the various sites. Chapter Eight initiates the important three year analyses of the productive roles external resources may play in the initiation and institutionalization of these Special Strategies. Requirements for and implications of parent involvement for the various strategies are explored in Chapter Nine. Several implications of the knowledge gained in year one for replication are discussed in Chapter Ten.

Part I

Special Strategies and the Academic Lives of Students

by
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Johns Hopkins University

A primary goal of the Special Strategies studies is to thoroughly describe the workings of various promising programs. To gain a detailed understanding of the strategies, research teams have endeavored to see each program from several different perspectives.

The most potentially divergent perspectives are those of the program developers and the students receiving the programs' services. Developers invent programs. Their ideas are often pulled from the highest aspirations adults have for our children.

However, developers disagree as to the level of program specificity required, or even desirable, for implementation. Some special strategies involve elaborately detailed plans for the implementation of specific curricula, instructional techniques, and media. Others deliberately rely on local educators to provide expertise in choosing everything from reading primers to "essential questions." Developers are often unaware of how their programs are being implemented.

Students, by contrast, are rarely aware of the philosophical underpinnings of the programs they attend. Students often are unaware even that they are in a "special strategy." Rather, they experience a world of books, papers, computers, libraries, teachers, para-professionals, and peers.

Chapters Two, Three, and Four of this First Year Report examine 10 different Special Strategies from often differing perspectives. The first is the perspective of the intended intervention. Chapter Two describes programs as they are supposed to be. It provides a general outline of the similarities and differences among several promising adjunct (or "pullout") programs, schoolwide efforts, and three "philosophy based" school improvement strategies.

For each program, two (and in one case, three) implementation sites are briefly described. Similarities and differences between the within-program sites and implementation efforts are noted.

Chapter Three provides a second perspective on the promising programs. Chapter Three examines the various program types from a classroom/instructional perspective. Emphasis in this section is on the effects of the strategies on the quality, appropriateness, incentive structures, and especially time use in the Special Strategies schools.

Chapter Four is devoted to examining the programs as they are received by their intended audiences, the students. In this section, qualitative data from whole day observations of nearly 75 students (two or three per site) are examined. Within- and across-program themes are explored from the perspectives of persons "on the other end of the telescope."

As with all other sections of this report, findings from the whole school day observations are tentative. As this first year report is being written, research teams are re-visiting the 25 schools, gathering new data on both the programs and the programs' long-term impacts on students. Second and third year analyses will have considerable potential to modify first year findings.

After the descriptions of programs from programmatic, classroom, and student perspectives, this report presents findings relevant to program implementation and institutionalization. The roles of the school, of staff development efforts, of external resources, and of parents is examined in Part II.

Chapter Two

Characteristics of Programs and Strategies

by
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The Johns Hopkins University;
Mary Ann Millsap,
Abt Associates;
and
Project Staff

This chapter describes the programs and strategies included in the special strategies study. Data are taken from the case reports prepared by teams that visited sites in the fall and spring of 1991. First we present a preliminary way of characterizing the strategies included. Next we provide a description of each special strategy that provides information on what the developers' intended program, curriculum or philosophy entails. We discuss program philosophy and goals, program components, staff development, parent involvement and initial requirements for implementation. Finally a brief description of each site is presented.

Initial criteria for selecting promising strategies included in the study were five: (1) the program was being used in Chapter 1 contexts, (2) the program had been evaluated and found effective in increasing the reading or math achievement of disadvantaged students or in such cases as schoolwide projects, was new, promising, and clearly relevant to the future of Chapter 1, (3) there were multiple replications of program success, (4) developers were willing to identify multiple program users, and (5) programs represented a wide range of program types in urban and rural communities—e.g., regular classroom programs, peer tutoring, schoolwide projects. Specific promising program types—such as schoolwide projects in the urban special strategies—were intentionally over sampled because of the high concentration of poverty and the effectiveness of such approaches (Lytle & Davidoff, 1990, Davidoff & Pierson, 1991). Strategies included in the urban study were Success for All, Comer's School Development Model, Paideia, schoolwide projects (including extended time), and Sizer's Coalition of Essential Schools. In the rural component, the programs studied included Re:Learning/Sizer's Coalition of Essential Schools, schoolwide projects, tutoring, computer-assisted instruction, and extended time.

Characterization of strategies

Strategies included in the study were initially characterized on the degree of intended impact on the curriculum and instruction Chapter 1 students receive. Chapter 1 programs in the past have tended to emphasize service delivery models outside the regular classroom, such as "pullout" and laboratories that functioned apart from the core curriculum. In the Special Strategies study, these types of programs are categorized as "adjunct"—as additions to the regular curriculum. Programs such as METRA, computer assisted instruction, and Reading Recovery have their own methods and materials. The focus is typically on remediation for specific subpopulations of students within a school (the exception is a computer assisted instructional program in one rural site that is also a Schoolwide Project). Thus, the intended impact is directly focused at the individual student level rather than at the school level.

A second category of strategies—labelled "schoolwide"—includes those in which the intended impact is focused on changing the school organization and the core instructional program. These strategies, for example, identify needed changes in the management and organization of schools, yet also attempt to upgrade the entire core curriculum that Chapter 1 students receive. These strategies, when locally developed, tend to be diffused in terms of a particular model of learning and are often heavily dependent upon the principal's leadership and district support. Other non-locally developed schoolwide programs, such as Success for All, target the prevention of learning deficits by modifying the curriculum and instruction all students receive.

A third category of strategies labelled "philosophical" are those which intend to change the basic underlying assumptions of teaching and learning in schools. These strategies include the Paideia, Sizer, and Comer models. In Sizer and Paideia, the intended impact is targeted on teaching and learning within the school. In the Comer process, the intended impact on curriculum and instruction is more indirect. A major focus is on the involvement of the community in school governance; another component is the incorporation of mental health and child development principles in the school curriculum. Strategies identified in each of these categories are listed in Figure 1.2 on page 1–24.

Another dimension on which strategies could be categorized is the prescriptiveness in adherence to a specific model of learning. An example of a strategy on the high end of this dimension would be Reading Recovery, which requires strict adherence to specific routines, beliefs, and practices based on Marie Clay's (1985) prescription for teaching reading. At the opposite end of this continuum are strategies that extend the amount of school time. Based on Carroll's (1963) notion of time needed to learn specific tasks, these programs provide additional time in the school day or school year; however, they do not necessarily prescribe specific practices or instructional methods. Other strategies are more descriptive and diffuse—for example, the Coalition of Essential Schools Model restructures the school and changes the nature of teacher-student relationships. The more global strategies are of two types—those focused directly on changing the nature of the curriculum and instruction students receive, and those where the primary focus is on external factors such as mental health and school governance, which indirectly affects learning.

This chapter presents program descriptions for each strategy —philosophical, schoolwide, and adjunct—in that order.

Program Descriptions

Philosophical Approaches

Coalition of Essential Schools

PROGRAM NAME AND GRADE STUDIED

The program is called the Coalition of Essential Schools (CES), which is designed to restructure high schools. The focus in this study is on CES as it relates to a cohort of students as they progress from grade nine through eleven.

PROGRAM DEVELOPER(S)

The Coalition of Essential Schools is an extension of *A Study of High Schools*, an inquiry into American secondary education conducted from 1979 to 1984 under the sponsorship of the National Association of Independent Schools. As part of its findings, the study identified five "imperatives" for better schools, which are detailed in *Horace's Compromise: The Dilemma of the American High School* by Theodore R. Sizer (1984).

PROGRAM PHILOSOPHY AND GOALS

The philosophy of the program is the belief that a secondary school should be a place where decency prevails, where social and professional relationships are typified by tolerance, generosity and fairness. This philosophy proposes an ideology about schooling and learning that places "personalization" high on the list of imperatives. The philosophy advocates a total restructuring of traditional school organization, practices, and beliefs that typify American high schools.

The program goals are drawn from a set of nine principles that are set forth by the CES developers and serve as a framework for all participating secondary schools to provide students with a "personalized education":

- *One overarching goal*—Schools should be less comprehensive and more "basic" in terms of focusing on helping adolescents learn to use their minds well.

- *Simple goals*—The schools' goals should be simple: "that each student master a limited number of essential skills and areas of knowledge."

- *Universal goals*—The schools' goals should apply to all students, although the means to the goals will vary as those students themselves vary. School practice should be tailored to meet the needs of each group.

- *Personalization*—Teaching and learning should be personalized to the maximum extent feasible. To that end, a goal of no more than 80 students per teacher should be vigorously pursued, and decisions about curriculum, allocation of time, and choice of teaching materials and their presentation must rest unreservedly with the school's principal and staff.

- *Student as worker*—The governing practical metaphor of the school should be student-as-worker, rather than the more traditional teacher-as-deliverer-of instructional services. A prominent pedagogy should be coaching, to provide a strategy whereby students learn how to teach themselves.

- *Diploma by exhibition*—The diploma should be awarded upon a successful final demonstration of mastery—an Exhibition—of the central skills and knowledge of the school's program. The familiar progression through strict age grades and "credits earned" by "time spent" in class will be unnecessary.

- *Attitude*—The tone of the school should explicitly and self-consciously stress values of unanxious expectation ("I won't threaten you, but I expect much of you"), of trust (until abused), and of decency (fairness, generosity and tolerance).

- *Staff*—The principal and teachers should see themselves as generalists first (teachers and scholars in general education) and specialists second (experts in one particular discipline).

- *Budget*—Ultimate administrative and budget targets should include a total student load of 80 or less per teacher, substantial planning time and per pupil cost not to exceed the regular operating budget by over 10 percent.

PROGRAM COMPONENTS

- Reduced class size with frequent teacher-student interaction;
- Teacher serves as a facilitator of learning, rather than using didactic methods;
- Curriculum is based on interdisciplinary questions;
- Block scheduling and double periods are used to provide more time on fewer subjects;
- Student demonstrations or exhibitions illustrate the mastery of central skills and knowledge of the school program;
- School policies based on a system of trust and shared values, as well as belief and expectation that students can succeed;
- Teachers are generalists and serve in several roles, e.g., counselors, advisors, and managers.

PARENT INVOLVEMENT

Parents are to be involved in CES schools as collaborators; that is, staff perceive them as important in the educational process. Parents participate in coalition-sponsored conferences and events.

INITIAL REQUIREMENTS

Some schools volunteer as sites within the Re:Learning component, which is the Education Commission of the States' attempt to restructure from the state level to the school level around the CES philosophy. Other schools interested in the CES are required to apply to the central office at Brown University. Member schools in the coalition are selected with four criteria in mind: (1) diversity, i.e. location and type of school, (2) agreement with the common principles, (3) moral, professional and financial support necessary to implement the principles, and (4) commitment on the part of leaders and staff at each school.

According to CES guidelines, member schools are expected to (1) obligate themselves to the Common Principles, (2) work overtime toward "whole school" involvement in the coalition, (3) participate in at least one professional development activity offered by the coalition throughout the year, (4) document coalition-related activities and discussions, (5) share information about work with central coalition staff, (6) undergo self-evaluation every three years (which includes hosting a visiting committee), and (7) demonstrate it is able to fund coalition activities (Coalition of Essential Schools, 1990).

A major requirement to implement this philosophy is in staff development. CES offers workshops and sessions in the philosophy and principles. All of the actual revisions and development of new curricula are determined by staff in each individual site. The Essential Schools Coalition provides a framework and philosophy but not specific curricular materials or instructional methods to operationalize the principles.

THE URBAN SITES

Sizer–A High School is a comprehensive senior high school located in a lower middle class community in an urban city. The neighborhood is predominantly African-American. The school enrolls approximately 1,200 students and includes grades nine through twelve. Ninety-nine percent of the students enrolled are African American and 56 percent are eligible to receive free lunch. The school is in its sixth year of operation as a member of the CES. A full-time facilitator supervises teams of teachers, teaches students, and manages the day-to-day operation of the program. As of September 1991, grades nine through eleven participated in the Essential Schools program. Sizer–A has graduated two classes of CES students. The focus of the program is to increase student achievement through increased attendance and a personalized approach to teaching and learning. Teams of teachers work collaboratively to plan lessons and activities that address interdisciplinary themes/topics, in addition to two-hour blocks of in-class instruction in essential subjects such as English, math, science, and history/social studies. The key pedagogical approach used is coaching in order to promote group problem solving and enhance students' thinking skills. Cooperative learning activities are used in a majority of the classes. The teams actively promote career and college awareness, with goal-setting beginning in ninth grade. Based on a 1988 evaluation, students who participated in the Essential Schools program had higher attendance rates, higher promotion rates, and higher standardized achievement after two years in the program. A recent study indicated that students in grade nine in the Essential Schools program had better attendance and a better performance on a statewide competency test than comparable students in the traditional program.

Sizer–B High School is a comprehensive high school near a mid-sized city in a south central state. The school is in a rural area outside the nearby city, and its 1,150 students are bused from the city as well as the surrounding rural areas. The school has participated in a court-ordered desegregation plan for the past 15 years, and its students are 70 percent White and 30 percent African-American. It has over 70 certified teachers including 11 special education teachers and 3 counselors. Approximately 50 percent of students qualify for free or reduced-price lunch.

The school operates a wide variety of special programs that represent efforts to operationalize CES principles such as teaming, interdisciplinary courses, shared decision making, and teacher-guided assistance for students. In the 1991-92 school year, all of the ninth grade students and faculty are organized into three teams. Throughout the school, special education students have been mainstreamed and ECE teachers assist students in the regular classrooms.

Specially designated honors classes have been eliminated although students may contract to complete work that will earn them honors credit. Future plans include organizing all of the ninth and tenth grades in teams and implementing one experimental eleventh/twelfth grade team. During the first year of the study, the focus was on a program for ninth graders that adheres closely to CES principles such as smaller class size, teaming, and joint planning time for the teachers. The six teachers who participate in the program provide teaching as well as motivational and affective support for members of the program. The CES program works with 120 ninth graders (about one-third of the ninth grade) including both at-risk and other students. The CES program began at the same time the school joined the Coalition for Essential Schools (in 1988) in response to a district mandate to the principal to improve the school. Much of the culture of the school results from the principal's energetic and thorough commitment to the Sizer approach.

Sizer–C High School is a comprehensive senior high school and enrolls a student population of about 650. The ethnic mix at the high school is 42 percent African-American, 44 percent White, 12 percent Hispanic, and .5 percent Asian. After the school district underwent court-ordered busing in 1978, Sizer-C High School eventually became "racially identifiable"; i.e., disproportionately populated with students from African-American and Hispanic families. Approximately 53 percent of the students are eligible for free lunch. Sizer–C High School is in its third year of operation as a member of the CES. The principal volunteered when the state became a Re:Learning state. There are approximately 60 ninth and 60 tenth grade students presently participating in the program. Operating as a school-within-a school, the program's focus is to increase attendance, achievement, and change students' attitudes about school by raising their self-esteem and feeling of self-worth. A team of six teachers work with students to create a sense of community and caring. Two hour instructional blocks in English/humanities and math/science are implemented..

URBAN SIZER SITES COMPARISONS

All three urban sites, Sizer–A, –B, & –C, participate in the CES program and have attempted to operationalize the philosophy inherent in the Coalition's principles as a means to increase achievement and graduation rates through a "personalized" approach to educating students who may be at risk of dropping out. All three sites have "teams of teachers" that teach program students specific subjects in order to foster personal relationships among teachers and students. The teaming provides teachers opportunity for "collective planning" in addressing students' personal needs and curricular issues. Thus, team teachers serve not only as teachers but also as "counselors" to program students. In Sizer–A, the core group of teachers who initially implemented the philosophy remain actively involved in the program. In Sizer–B, the team has undergone some changes but a core group is still evident. In Sizer–C, due to retirements and changes in district and school level administration (staff turnover was 50 percent in 1990-91), only one of the original core teachers is present. All three sites provide "two-hour blocks of instructional time" in "essential" subject areas such as math, science, English and social studies. All three sites emphasize personalization as critical to the success of the program.

In Sizer–A and –B, the principal's leadership and commitment to the philosophy and to making schools a better place are evident in the implementation of the CES philosophy. These principals provide both symbolic, (i.e., they are "true believers") and instrumental leadership (i.e., provide release time for teachers, write grants, assist with scheduling). In Sizer–C, the principal is supportive but not involved. Program management is different at Sizer–A than at the other two sites. That is, a coordinator/facilitator is responsible for the day-to-day operation of the program at Sizer–A; Sizer–B has a half-time teacher who provides some coordination; Sizer–C does not have a formal position for a coordinator. The level of staff expertise in curriculum development and creative instructional techniques differs dramatically between the sites. Teachers at Sizer–B and –C tend to rely heavily on an individual seatwork approach to operationalize the student-as-worker principle. Essential schools teachers at Sizer–A were observed having students use dramatization and role playing, e.g., re-writing "The Trial of Socrates" in modern day language, using cooperative learning, and coaching individuals and groups to encourage problem solving and analytical thinking. Since Sizer–A's program is in its sixth year of operation, it has implemented junior and senior "exhibitions." These oral and written presentations are essentially a final research paper, science experiment or demonstration conducted and carried out totally by the student. Sizer–C's program is in its third year of operation and has not yet had a senior class.

THE SUBURBAN/RURAL SITES

Sizer–D and –E, the two sites visited for the Suburban/Rural Special Strategies study, are both members of Re:Learning. Re:Learning is an Education Commission of the States (ECS) sponsored effort to facilitate the implementation of CES goals by building supports for restructuring "from the statehouse to the schoolhouse." The state and district level principles which Re:Learning espouses as additions to the nine CES principles are as follows:

1. *Build a new vision of education.* This focuses on the goal that "all students have an equal opportunity to use their minds well through meaningful teaching and learning experiences."

2. *Organize on behalf of student learning.* These organizing tasks are not clearly defined, but are contrasted with "bureaucratic or political interests."

3. *Create new working relationships.* These relationships are intended to be built on collaboration and mutual responsibility.

4. *Develop a culture of learning.* This is a context in which adults see themselves as continual learners and problem-solvers, and is contrasted with adults as "purveyors of 'right' answers and standardized solutions."

5. *Develop coherence and meaning in all actions.*

6. *Act with regard for people.*

To implement the goals of Re:Learning and CES, states were awarded five-year grants. In turn, the states identified 10 schools each, and awarded grants to those high schools for the implementation of CES/Re:Learning. The first year of those five was to study available options. The second year was for planning. The third through fifth years were for implementation. Special Strategies visited two Suburban/Rural Re:Learning sites during their third year of participation in the program. In effect, they were in their first year of full implementation.

Sizer–D is the high school for a district serving a small town and surrounding rural countryside. Though not highly affluent, the community has experienced relative economic stability over the last several years. Sizer–D has under 800 students, and its enrollment has been declining. The Re:Learning project at Sizer–D was spearheaded by an energetic member of the English faculty. She was operating with the full support of the superintendent and the relatively passive support of the principal. The school and district decided to begin implementing Re: Learning during the 1990-91 school year. They began with one ninth grade team, serving 80 students, and with a twelfth grade humanities, two periods per day section. The plan has been to expand the program to the tenth grade during the 1991-92 school year, and to slowly create a full Re:Learning school. Staff development offerings have been extensive, and evidence of implementation within the bounded areas is strong. The team demonstrated considerable cohesion, students expressed pleasure at participation, and the superintendent's support has not flagged.

Sizer–E high school serves a similar size town and surrounding agricultural area. The economy of the county has been in decline for several years, and it is possible that the county's major industry will close next year, further darkening the picture. The site was nominated by its state department as the most shining implementation of Re:Learning in the state. The faculty had decided to implement Re:Learning on a teacher-by-teacher basis. During the first year, this resulted in several notable successes. A social studies downtown development project was of such quality that the local Chamber of Commerce is using it unedited. A two hour humanities course was considered a success. However, scheduling problems, especially common planning periods for faculty, remained unresolved. Due to the troubled economy, teachers had not had a pay raise in two years and several faculty members faced the possibility of being permanently laid off. Staff morale was understandably low, and these issues did not facilitate implementation of Re:Learning. A new superintendent had come to the district, and no notable effort had been launched by either "the statehouse" or "the schoolhouse" to obtain his enlightened support for Re:Learning.

Suburban/rural site comparison

The two rural Re:Learning sites typify the problems and promises of restructuring high schools. The economically less advantaged students in both sites appeared to be obtaining benefits from participation in the program. However, no one at either site believed that Sizer's principles could be implemented for only 10 percent more than previous instructional delivery, and money for continuation and expansion was in short supply. Because both sites reside in single high school districts, these schools offer an unusual opportunity to study the effects of central office leadership on schools' efforts to implement changes.

The Paideia Program

PROGRAM NAME AND GRADE STUDIED

This Paideia Program is designed for learners of all ages in grades K–12. The program has been implemented in elementary, middle, and secondary schools. This study describes a cohort of students as they progress through grades three, four, and five.

PROGRAM DEVELOPERS

The program is described by Mortimer Adler in his *Paideia Proposal: An Educational Manifesto* (1982). The book sets forth Adler's concept of how children should be educated in a democratic society.

PROGRAM PHILOSOPHY AND GOALS

Adler espouses the idea that all children are entitled to the same education both in terms of content and in terms of instructional methodology. That is, all children should be given "cream" rather than some being given "cream" while others are given "skim milk." The program is meant for all students regardless of their abilities. It seeks to develop all aspects of the students' cognitions. A fully implemented Paideia Program includes as its goals: (1) "acquisition of knowledge," (2) "development of intellectual skills," and (3) "enlarged understanding of ideas and values" (Adler, 1984, p. 8).

PROGRAM COMPONENTS

Adler's *Proposal* hinges on the utilization of three methods of instruction: didactic, coaching, and Socratic seminar. *Didactic* instruction is the kind of instruction currently found in most classrooms in which "teacher talk" is the focus of instruction. Adler believes this type of instruction is more appropriate for "acquisition of knowledge" (p. 8).

He describes *coaching* as one-on-one instruction in which the teacher/coach works closely with students to improve their skills rather than assuming that students are able to transfer general corrective statements to their own work. It can also take the form of peer tutoring or computer assisted instruction. This kind of instruction, says Adler, is most appropriate for "development of intellectual skills" (p. 8).

Socratic seminars are the centerpiece of the Paideia concept. They are discussions among students and teachers based primarily on divergent questions so that a true exploration of ideas can ensue. Adler sees this kind of instruction as most appropriate for "enlarged understanding of ideas and values" (p. 8).

Adler points out that coaching and Socratic seminars are unusual in contemporary classrooms. Adler summarizes the three kinds of teaching on a chart with each method composing a column—thus a school that has totally embraced the Paideia concept is a "three-column" Paideia school.

The program is unique in several ways. First, through the conduct of seminars it stresses the equality of opportunity for all learners to discuss ideas presented in pieces of literature and other pieces of art. Second, the seminars redefine the role of the teacher. That is, the teacher becomes an instructional facilitator rather than a storehouse of knowledge. He or she becomes a seeker of knowledge along with children. The coaching aspect, too, is a unique attribute of the program. It emphasizes the individuality of children's needs during the development of skills and requires the teacher to provide individual instruction to each learner to help in that development.

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PARENT INVOLVEMENT

Adler does not speak directly to the issue of parent involvement. According to the program coordinator at one of the sites studied for this project, "Adler makes assumptions about parent involvement, but that's because he was born . . . years ago . . . when parents were involved with their children." (Both sites being described in this study have included parent involvement as a primary goal of their schools and have designed activities and projects to involve parents in their children's education.)

INITIAL REQUIREMENTS FOR IMPLEMENTATION

In his trilogy, *The Paideia Proposal, Paideia Problems and Possibilities*, and *The Paideia Program: An Educational Syllabus*, Adler basically presents the theoretical underpinnings of Paideia and provides "some tentative suggestions" (1983, p. 66) for the actual implementation of the program. He does not, however, provide teachers and school administrators with a model program containing specific guidelines for schools that want to become "three-column" Paideia schools. Instead, Adler leaves "the steps of implementation to practitioners on the spot" (1983, p. 75).

Therefore, schools which wish to implement the program must base implementation on their own understanding of Adler's *Proposal*, visits to other Paideia sites, conversations with fellow implementers, and workshops they might arrange. Approaching implementation in this manner is a monumental task. Not only are the logistics of arranging visits among those interested in the concept difficult but the areas left rather grey by Adler in his writings are large, thus requiring much interpretation by implementers. Furthermore, the Paideia content suggested by Adler is stringent in that it is based primarily on great works of literature. Additionally, teaching methodologies are complex, requiring skills not usually part of teacher education programs. And, finally, the integration of the content with the methodologies requires an understanding of the various pieces of the program as well as an overall vision of it.

It appears from reading Adler's trilogy that, to implement the Paideia concept in its most basic form, very few resources are required beyond the purchase of a library of "great books" and some training of teachers to conduct seminars and to act as academic coaches. Adler sees both of these pieces as being very simple. And, while the purchasing of books may be a simple matter—assuming that monies are available for books anyway—teacher training is not necessarily so. Adler sets forth the notion that as long as a small cohort of strong teachers are part of the program, they will be able to pull the others along and strengthen the skills of those weaker cogs in the Paideia machinery. (Based on the observations of these researchers, that is probably not the case. Staff development is a very important piece of the program at both sites included in this study. Likewise, implementers usually choose to have much more in the way of supportive staff and resources—a program coordinator, computers to assist in the coaching of students, electronic bookshelves to monitor student's reading, hands-on science materials, and whole-language-based texts, parent-volunteer coordinators, etc.)

EVALUATIONS OF PAIDEIA

Although Adler's *Paideia Proposal* has received much attention and the program has been implemented in approximately 125 sites across the United States, research related to the implementation has not been substantial. A description of the implementation of the program at Sullivan High School in Chicago has been published as a monograph entitled *The Engineering of the Paideia Proposal*. The piece, written by principal Robert D. Brazil (1988), includes results of surveys of students and teachers to determine perceptions of the level of implementation of Paideia "teacher behaviors." Results show that teachers reported exhibiting these behaviors to a greater extent than students reported seeing them.

In addition, the Chicago Public Schools' Department of Research, Evaluation and Planning conducted a study of the Paideia Programs in several elementary schools. Results show that (1) faculty "experienced both professional and personal growth through participation in the...training program;" (2) "fewer Paideia students failed subjects and missed school than students citywide;" (3) "participation...increased student self-confidence;" and (4) students "improved...expression of ideas, ability to support ideas with relevant information, better thinking and listening skills." Likewise, an assessment of students' writing skills "suggested that Paideia had a long-term effect on students' writing and thinking."

Finally, a recent ERIC search indicates that *Tennessee Education* devoted its winter 1984 issue to "an examination of Mortimer Adler's *Paideia Proposal*" and includes articles describing *possible* effects of the program on the teaching of arts, music education, language arts study, drama and imaginative play in children, dance education, visual arts instruction, and fine arts curricula.

THE SITES

Paideia–A is a K–8 inner-city school with approximately 900 students, 90 percent of whom are economically eligible for Chapter 1 services. The student population at Paideia–A is 100 percent African-American. Paideia–A is in its eighth year as a Paideia School. The Paideia Program is an integral part of the school's curriculum and is implemented in every classroom in the school. Therefore, all children at Paideia–A are involved in Paideia. The focus of the school's Paideia Program is primarily on the conduct of weekly seminar discussions of literature followed by a coached activity. At Paideia–A the sessions are scheduled for 1 1/2 hours each Wednesday morning. Although the Paideia Program has been implemented primarily as part of the language arts program at Paideia–A because of the emphasis on the discussion of great pieces of literature and the emphasis on writing during the follow-up activities, it is the hope of both the administration and the coordinator that the basic tenets of the Paideia concept will permeate the rest of the school's instructional program.

Paideia–B is a 600-student K–6 school with a large exceptional education (handicapped) component drawn from many parts of the city. The school sits amid a lower-middle class neighborhood made up primarily of small brick and farm houses on the side streets and businesses on the four-lane main street that runs in front of the building. The school's population ranges from families on public assistance to middle class families. Paideia–B is in its third year as a Paideia school. Like Paideia–A, the Paideia Program is an integral part of the school's language arts program and has been implemented in every classroom in the school. Also like Paideia–A, the focus of the school's Paideia Program is primarily on the conduct of weekly seminar discussions of literature followed by a coached activity. At Paideia–B the sessions are scheduled for 2 1/2 hours each Wednesday morning. It is the hope of the Paideia coordinator and the principal that Paideia–B will become a "three-column" Paideia school with the tenets of Adler's Paideia Proposal evident throughout the school's instructional program.

COMPARISON SUMMARY

Even though Paideia–A's Paideia Program has been in place for eight years and Paideia–B's for three, and even though the communities and the student populations are different at each school, the implementation of the Paideia concept at both sites is quite similar. As noted above, both sites chose initially to adopt the program as part of the whole school's language arts program. One of the most important overall comparisons between the two sites is that the language of Paideia is the same at both sites. That is, the same goals are cited at both schools by all teachers and administrators. The same teacher and student behaviors important to the program are cited at both schools by all staff. Additionally, the pieces of the program have the same names at both sites. For example, coaching is the same at both sites, as is the conduct of the seminars.

Both sites emphasize the centerpiece of Paideia, the Socratic seminar. Perhaps the most significant difference in the implementation process at the two schools has been sources of funding. Paideia–A draws monies from a variety of sources including a local bank, the Chapter 1 program, and desegregation funds. Paideia–B, on the other hand, relies primarily on the school district's Flexible Funding Grants Program and supplements those funds with smaller grants from other sources, including the state Department of Public Instruction and at least one private business. Both sites seem to have a certain pride about their Paideia programs. And, even though there are kinks in the system in both places, teachers, children, and parents express the belief that there is something unique about the education being received at their schools.

The Comer School Development Model

PROGRAM NAME AND GRADE STUDIED

The program is called the *School Development Program (SDP).* The model is designed to be implemented in any school serving kindergarten through grade 12; however, the majority of sites adopting the model have been elementary and middle schools. This study focuses on a first grade cohort as they move through the first three years of elementary school in two schools.

PROGRAM DEVELOPERS

The program evolved out of the work of the Yale University Child Study Center under the leadership of James Comer, a child psychiatrist and administrator within the Yale Medical School. The most common source quoted for the model is Comer's 1980 book, *School Power: Implications of an Intervention Project.* The project was initially designed close to 20 years ago.

PROGRAM PHILOSOPHY AND GOALS

The program is based on a strong commitment to expand the role of schools in dealing with the developmental needs of children, particularly disadvantaged children in urban settings. Back in the late 1960s and the early 1970s, Comer and his Child Study colleagues held the belief that the effectiveness of schools depended on their ability to meet the mental health and social needs of children. One major strategy to achieve these goals was for schools to become less isolated from their communities. Community participation, particularly by students' parents, at all levels of school functioning is considered critical.

The program aims in the long term to improve the academic achievement of students. However, it believes this goal can be met most effectively by dealing with community involvement and the affective and social needs of children.

PROGRAM COMPONENTS

The model intervenes at the school level rather than the classroom level. The following is a description of the model as noted in Haynes, Comer, and Hamilton-Lee (1988):

> *Governance and Management Team.* The governance and management group is representative of all adults involved in the school. It typically includes the principal, two teachers, three parents, and a mental health team member. The leadership of the group rotates in some sites, but for the most part, the principal chairs the team meetings. The group should meet on a weekly basis. The leadership rotates in Comer–A, and a big problem in Comer–B is that the principal never relinquishes the traditional principal role.
>
> The function of this group is (a) to establish policy guidelines to address curriculum, social climate, and staff development; (b) carry out systematic school planning, resource assessment and mobilization, program implementation, evaluation and modification of the curriculum, social climate, and staff development areas; (c) coordinate the activities of all individuals, groups, and programs in the school; and (d) work with the parent group to plan an annual social (activity) calendar. One product of this group is an annual Comprehensive School Plan.

Mental Health Team. A classroom teacher, special education teacher, the social worker, and the school psychologist typically constitute the Mental Health Team. The team provides input to the work of the governance group, integrating mental health principles with the functioning of all school activities. The team also serves individual teachers by suggesting in-classroom ways to manage early and potential problem behaviors. It trains school personnel to provide a variety of child development and mental health sensitive services. The team should act in a preventive mode rather than a crisis response mode.

Curriculum and staff development. Curriculum and staff development are part of the plan developed by the governance team. This component provides instruction, direction, and support to teachers in order to enhance the quality of education received by children. A major focus is to integrate a mental health approach into curriculum activities. A focus on the development of a "social skills curriculum" is encouraged.

Evidence for program effectiveness. Given the long history of the School Development Model, the evaluation evidence to date has been limited. A recent document by the Child Study staff has summarized published studies on the model. To quote Haynes from a recent newsletter:

> The studies were conducted between 1985-90 and examined SDP effects on student achievement, behavior, attendance, self concept, and assessment of school climate by students, parents, and teachers. . . . The studies, which are mostly quasi-experimental in nature, demonstrated significant positive effects of the SDP on measured outcomes. (Full summary available.)

PARENT INVOLVEMENT

Three types of parent participation are encouraged. The first level is concerned with structuring broad-based activities for a large number of parents. At a second level, approximately one parent per professional staff member works in the school as a classroom assistant, tutor, or aide. At a third level, a few highly involved parents participate in school governance.

INITIAL REQUIREMENTS

The School Development Program is typically implemented over a number of years. It may be implemented without large amounts of additional resources in the form of staff, equipment, or materials. The major requirements are that the school staff and community are committed to the goals of the program and are willing to become involved in staff development activities. It is likely that no site involved in the Comer model would state that they have fully implemented the model. Training and monitoring are required to support the model regardless of how long the school has implemented the model.

Staff and parent development activities would initially focus on how to be an effective member of the school governance and mental health teams. Districts receive initial training and monitoring by the Child Study group at Yale. However, the Yale group encourages districts to carry on training on their own as soon as possible. Resources may be necessary to fund parent aides, parent involvement activities, and social skills curriculum materials. These vary from site to site, depending on other resources such as Chapter 1.

Perhaps the most critical requirement for implementation is that the staff believe in the underlying philosophy and assumptions concerning shared decision making, the whole child perspective, and the high expectation for student success.

THE SITES

The *Comer–A* school is a Head Start through fifth grade community school, located within an inner city. The total school population is 545 with 95 percent African-American, 70 percent of students eligible for free and reduced-price lunch. Students come from a neighborhood that consists primarily of rentals and substandard low-rise housing units. The school initiated the Comer process during the 1985-86 school year. It had the advantage of a new principal who believed in the model, other schools in the district already involved with the model, and the support of the developer in a nearby location. Currently all aspects of the SDP are in operation at this site and seem to operate at a very high level of implementation. Continued staff and parent development, particularly around school governance, and greater involvement from a larger group of parents are current goals for improvement. A school principal willing to share decision making appears to be a critical element in the success of the model. Results in the form of improved achievement and strong staff morale suggest that the SDP has made an important difference in this school over the last six years.

The *Comer–B* school is a pre-kindergarten through sixth grade elementary school. The school serves a community which is economically very depressed. Its 528 students are 95 percent African-American with an estimated 50 percent of its children receiving Chapter 1 services (pre-kindergarten and fourth-sixth grade resource teachers). The economic stress on the city, the community, and the school is quite evident. The SDP started in the early 1980s as part of a court desegregation decree. This site started implementation five years ago with the arrival of a new principal. Although many of the components of the SDP are in operation, such as the Governance Team, the Mental Health team, and the parent involvement program, they do not appear to be meeting the original goals. Staff morale is poor. The governance and mental health teams do not seem to be effective. Although district and school administration are supportive of the model, the staff do not feel it is effective. One positive note was that the parent participation in the school appeared to be strong. However, in light of limited school resources, inadequate training, and a lack of staff commitment to the model, it is difficult to point to Comer–B as an exemplary site for the SDP.

Implementation of the SDP at the two sites differs dramatically. Comer–A is doing the SDP—all the components are in place, administration and staff believe in the model, and they are well trained to carry it out. Being close to the developer is an asset. Comer–B is effective in their parent involvement activities. The other components are in place but do not operate in a manner consistent with SDP objectives. There is not a sense of shared decision making in the Governance Teams and members of the Mental Health Team are too crisis oriented and do not focus on preventive activities.

Program Descriptions

Schoolwide Strategies

Schoolwide Projects

PROGRAM DEVELOPERS

Schoolwide projects have been a funding option under Chapter 1 since 1978. However, the 1988 Hawkins–Stafford Amendments eliminated local districts' matching funding requirements. The effect of this legislative change was to make the option more attractive to local school districts. Individual districts and schools are free to develop their own programs in ways which seem most appropriate to local conditions.

Although systematic research on schoolwide projects is just beginning (Fagan & Heid, 1991), and most of that research is being conducted in urban settings (e.g., Winfield, 1991) it would appear that fewer schools opted for schoolwide project status during the first three years than Congress and U.S.E.D. had hoped. Recent evidence suggests that the number of schoolwide projects nationwide has more than tripled from 180 in 1988 to 664 in 1989 (Report of the Subcommittee on Elementary, Secondary & Vocational Education of the Committee on Education & Labor, U.S. House of Representatives, 1990).

PROGRAM PHILOSOPHY AND GOALS

"Schoolwide Projects" is a Chapter 1 funding option, not a specific program. Under this option, individual schools and districts may choose to identify or invent any program which will plausibly improve Chapter 1 students' academic performance.

The following general principles appear to have guided Congress in authorizing increased use of the schoolwide project option:

A. A concern that when poverty in a school reaches a very high level, there are likely to be concomitantly high incidences of educational deprivation. Therefore, it may make more sense to upgrade the whole school rather than focus on individual children

B. A perception that very high levels of pullout programs may not be in students' best interest;

C. A belief in the validity of the "school effectiveness movement" findings that there are five or more known "correlates" of school effectiveness, and that these are alterable (Edmonds, 1979; Levine & Lezotte, 1990);

D. A belief that schools are the primary, logical unit of educational improvement; and

E. An extension of the belief, implicit in Title I/Chapter 1, that local educators are more likely than the federal government to know what educational interventions will be effective for their students.

In exchange for the unusual level of freedom to make programming decisions, schoolwide projects must face somewhat higher levels of program accountability requirements. While schoolwide project developers are free to implement whatever programs they believe will be most effective in serving their entire schools, they are held accountable for the academic achievements of the students who would have been identified as Chapter 1 students in the traditional system. These accountability requirements include both basic and higher order skills in the targeted areas (reading, mathematics, and language arts). Schools must perform better than they did before implementing the schoolwide project.

PROGRAM COMPONENTS

The schoolwide project option allows great freedom in the choice of program components. Many schools elect to reduce class size. Two additional very common components are increased money for staff development and materials. Many schools have introduced or upgraded computer lab facilities.

Research on reduced class size indicates modest effects (Slavin, Stringfield, & Winfield, 1991). Adequate research on the long term effects of most forms of staff development does not exist. Independently conducted research on the benefits of various forms of computer assisted instruction is sparse, but tends to find modest positive results (Levin & Meister, 1986, and see Slavin, 1991 for a recent counter-example.)

PARENT INVOLVEMENT

The Hawkins-Stafford Amendments and related non-regulatory guidance strongly support schoolwide projects focusing on increased parental involvement. Some projects include a full-time, school-level parent involvement coordinator. Specific activities to achieve additional parent involvement are as diverse as the programs themselves.

INITIAL REQUIREMENTS FOR IMPLEMENTATION

Schools cannot apply for schoolwide status unless 75 percent of the student population the school serves is economically disadvantaged. The other universal requirement is that prospective schoolwide projects must conduct a self-study and submit a three year plan of action. This plan must be accepted by the local district and state education agency.

Given that schoolwide projects is not a "program," beyond the above process requirement, initial requirements are as diverse as the given programs. They often include additional pay for teacher training before the project is to begin and throughout the project, the purchase of computer hardware and software, and the purchase of additional educational equipment.

Schoolwide Urban

PROGRAM NAME AND GRADES STUDIED

Schoolwide projects (SWP) were started in this major urban school system prior to the Hawkins-Stafford Amendments. Funds from a private foundation and from the system were used to target 11 of the lowest achieving schools. Schoolwide projects are now in operation in over half of the elementary schools in the system. The study describes two schools originating as SWPs in 1988 and a cohort of students as they progress from third into sixth grade.

PROGRAM DEVELOPERS

Since 1983, various initiatives targeted towards improving the achievement of Chapter 1 schools had been initiated by the superintendent. One of the past initiatives targeted the improvement of 26 Chapter 1 schools over a three-year period beginning in 1983. Funds from a private foundation and from Chapter 1 were used to support a school-based planning and implementation process. For the 1986-87 year, the system opted to designate 11 of these schools previously targeted as schoolwide projects, and to pay the matching share then required for non-eligible students who were receiving services. When the Chapter 1 guidelines were changed in 1988, the school system expanded the number in the program rapidly. At the same time these initiatives were underway, a system-wide Chapter 1 Task Force comprised of all of the major special interest groups and stakeholders (e.g., central office staff from budget, special education, curriculum, compensatory programs, district superintendents, teachers, and principals in Chapter 1 schools) reviewed the effectiveness of Chapter 1 programs over a 22-year period, and developed a comprehensive program for implementing schoolwide projects as an alternative (Winfield, 1991).

PROGRAM PHILOSOPHY AND GOALS

The school system's approach to SWP identifies five main thrusts:

- A whole school approach supports student success in the daily program, provides special support for students who require it, and is based on the "effective schools" research.
- School based management requires that the school staff and parents determine the nature of the intervention, within specified program guidelines and contractual requirements. (Chapter 1 funds are provided to each school as a block grant averaging about $250,000-$300,000 or $900/pupil.)
- Individual student, class, and school performance is monitored on an ongoing basis giving particular attention to those students targeted for intensive services and those who would be designated as Chapter 1 eligible should they attend a non-schoolwide project.
- District-based support by the central and subdistrict offices provides parent and staff training on an "as requested" basis. This support targets leadership development and team building, ongoing leadership team meetings for principals and key staff, and monitoring school improvement plans.

- Resources are concentrated, meaning that funds beyond the minimum amounts are committed from Chapter 1 and operating budgets. The underlying philosophy is on school change and prevention rather than remediation.

TARGET POPULATION

Schools are eligible according to the 75 percent economically disadvantaged criteria.

INTENDED OUTCOMES

The most frequently cited outcome is to raise the achievement of students attending schoolwide projects. Other objectives of the program are to change from a traditional "pullout" instructional delivery to a whole-school instructional focus to improve school climate, and to increase student attendance.

PROGRAM COMPONENTS

Newly created staff of the project are found at the district and school level. District level includes three program staff members: The *instructional interventionist* coordinates district-based resources for the school, assists in the development of school improvement and project plans, supervises the instructional support teachers and monitors progress. The *instructional support teacher* is assigned to the school (one or two days a week), supports the program support teachers and the School Improvement Committee, and provides staff development and administrative duties for the schoolwide project. The *parent trainer* serves as a resource for parent involvement activities.

Within the school, the key position is the *program support teacher,* funded by the Schoolwide Project and required by the district. She is the teacher of record for one class, and provides directed reading assistance to students for 90 minutes a day. She coordinates all project activities including the work of the School Improvement Committee (SIC) and the grade team meetings, provides staff development for classroom assistants, does all the administrative and paperwork for the project, and is the mentor for several new teachers in the school as well as peer coach for teachers. She is a key member of the Leadership Team of the school. Another member of the team is the elementary *math resource teacher*, who provides math instruction for students. The availability of these personnel allow for *reduced class size*, and *reduced pupil/staff ratio during reading*. The reduced pupil/staff ratio during reading instruction ranges from 10:1 to 15:1.

A *school/community/school liaison serves as a liaison between home and school and is* a member of the leadership team. She works on attendance (calls homes), does home visits for truancy and special problems, and coordinates parent activity (meetings, and GED pre-employment classes).

Using school-based management, decisions are made by teams. One team is the School Support Team which is the same as the School Improvement Committee. This team is headed by the program support teacher and includes grade level representatives. There is also a Leadership Team composed of the principal, Program Support Team members, math and reading resource teachers, and the home/school liaison. Grade level teams also meet regularly.

SPECIAL INSTRUCTIONAL/CLASSROOM MANAGEMENT COMPONENTS

The Central Office developed and provided staff development in several instructional frameworks from which schools could choose. The frameworks included factors such as high expectations, monitoring, positive school climate, and teamwork. They also included classroom-based strategies such as cooperative learning, active teaching and learning, and effective lessons. Attendance at staff development was highly encouraged and teachers were paid; however, it was voluntary. The frameworks provided a common language for staff to use to discuss students and instructional matters and served to facilitate team building. The particular instructional framework selected was not as important as allowing principals and teachers to select and adapt one which they felt was most appropriate to their school. Staff development included training of school faculty (on a voluntary basis) in the instructional framework that was chosen.

PARENT INVOLVEMENT

Another concern in this district's SWP sites was to involve parents in the educational process of their children. Each school's SWP proposal was required to delineate ways in which the site would conduct parent involvement activities. Schools were also required to include in their budgets funding for a school community coordinator, who was to be responsible for initiating strategies to improve attendance. At several sites, this coordinator is responsible for implementing a daily system of identifying all absent students in order to make immediate contact with the home. They also coordinated and directed parent workshops over the school year. "community assistants"—parents from the community who assisted in the classrooms—were also funded out of SWP budgets. These assistants were provided with a modest stipend and worked in 10-week cycles. Parents were observed in classrooms, assisting in the library, computer lab and lunchroom. A district-based parent trainer visits each SWP regularly to assist in recruiting and training community assistants and to assist in other parent involvement activities. Each site also had a trained home demonstrator whose sole purpose was to make home visits and work directly with parents on learning readiness, how to help their child with homework, and other school-related activities. These personnel, along with regular school activities, helped improve the number of parents involved in SWP.

INITIAL REQUIREMENTS

The initial requirements are substantial. The most critical include (1) funding for ongoing and continuous meaningful staff development in implementing school change as well as specific instructional strategies and (2) funding for additional professional staff, to reduce class size. SWP sites were initially required to submit a comprehensive proposal which linked specific instructional strategies, materials and personnel to a comprehensive school improvement plan and budget request. The review process applied specific criteria in terms of coherence of plans, selection of personnel, instructional materials, and proposed staff training.

THE SITES

Schoolwide–A is an elementary school in an urban area in a large eastern state. It is a small school, serving over 350 students in grades K–5. While the school is located in an attractive integrated neighborhood that has a mix of middle and working class families, it draws most of its students from a bordering disadvantaged neighborhood. The student body is primarily African-American, and approximately 80 percent of the students participate in the free or reduced-price lunch program. The schoolwide project began here in 1988-89 during the current principal's second year. The aim of the schoolwide project is to deliver services to all children in the school, whether or not they are identified as Chapter 1 students. In addition to the extensive programs and activities that stem from the schoolwide nature of the special strategy, the school is implementing a site-based management strategy, which extends decision-making down to the school level. Further, Schoolwide–A is adopting an approach to instruction based on Madeline Hunter's "effective instruction" framework. The school has been widely recognized for its success and received a Secretary of Education award for its unusually effective Chapter 1 program. In the 1989-90 school year the average NCE gain was 7.9 in reading and 11.2 in mathematics.

The school faculty has been relatively stable since the schoolwide project began, but recently it has experienced some turnover. The principal has been a catalyst for change in the school, and it is difficult to separate the effects of the schoolwide project from the effects of a visible and committed administrator.

Schoolwide–B is a K-5 school located in an extremely disadvantaged urban area in a large eastern state. The school's student population is 100 percent African-American, its enrollment is approximately 500, and it has a staff of about 45. Ninety-five percent of the students live in the housing projects which surround the school and bring with them the social problems associated with high poverty. Enrollment declined drastically when several of the high-rise buildings were condemned. Schoolwide–B is in its fourth year as a schoolwide project school, and has an extended school year (an 11th month) as a special strategy. The current school principal began when the school became a Schoolwide Project and initiated discussions with staff concerning extending the school year. Ninety percent of the staff agreed. The extra instructional time involves a 22-day period and focuses on remediation, enrichment, and staff development. A major objective is to reduce the number of retentions in grade. In addition to the extended year program, the school has implemented site-based management to the point where teachers make important decisions regarding staffing and allocation of resources. A number of additional instructional strategies have been implemented to upgrade the entire school curricula, including Project SEED, Writing to Read, alternative classes, and gifted classes. For the past two years, the school has received the district award for "the most improvement in student achievement." Evaluations of student achievement reveal substantial gains for this school. In 1989-90, the gains in grades 2–5 exceeded both the national average and the average of non-Schoolwide Project Chapter 1 sites in the school district. In reading, the average NCE gain was 4.16, and in math the average was 6.82.

COMPARISON SUMMARY

The continued support of the district for the development and deployment of school-based instructional staff, and the leadership and vision of the school principals combine to make these projects function. Yet, each is different in terms of school culture, school enrollment, principal's leadership style, and the school population served. In Schoolwide–A, the principal has worked with staff to encourage staff professional development and decision making. She has an "open door" policy and has been accessible yet firm and insistent in implementing components to increase student learning. The principal is hard working, dedicated, liked and respected. She was the catalyst for the program and remains firmly committed to it. She has successfully built a school management team that works well together to plan and implement special strategies and to allocate resources.

In Schoolwide–B the principal's commitment, leadership, and community outreach is evident. Teachers are actively involved in the actual running of the school, yet they are held accountable. The principal provides continual positive reinforcement to staff to combat the "burnout" that occurs working in a school in an extremely stressful and impoverished community. A lack of resources within this particular community, including for example, no mental health clinic or social workers, places added stress on the schools. Through the efforts of the school-community coordinator, coats, haircuts and other basic necessities are provided to needy students. Ninety percent of the staff and approximately 60 percent of students participate in the extra 22 days provided by the extended school year.

Extended Year Schoolwide

PROGRAM NAME AND GRADE STUDIED

Started in response to community advocacy efforts to improve schooling in the lowest achieving and predominantly African-American schools, the extended year schoolwide program encompasses ten inner city schools, serving kindergarten through sixth grade. The study describes a cohort of students as they progress from first into third grade.

PROGRAM DEVELOPERS

Following a directive from the superintendent, the school district developed a comprehensive program based upon proposals submitted by activists and others concerned about the continuing low achievement of African-American students. Planning for the program began in the spring of 1986, with initial implementation in the schools during the summer of 1987.

PROGRAM PHILOSOPHY AND GOALS

Philosophy. The early concepts came from two sources: one, a district paper developed in response to the superintendent's request and two, recommendations from a coalition of African-American organizations. According to the formative evaluation report, the plan was to provide each school with a dedicated and well-trained administrative team and teaching staff, and an instructional and organizational plan based on proven research.

These were among the principles to be followed:

- Create conditions that foster learning in the classroom;
- Develop a learning environment that demands excellence and that has high expectations for all students with the instructional focus on prevention, not remediation;
- Provide an orderly, supportive and directive environment;
- Foster collegiality and involvement and strengthen a supportive environment for teachers; and
- Provide an increasing degree of authority to parents regarding the quality of the school and teachers.

Target population. Schools had to meet two criteria. School enrollments had to be at least 60 percent African-American, and the schools had to be among the lowest-achieving elementary schools in the district, based on Comprehensive Test of Basic Skills (CTBS) scores. Twenty schools were identified; ten participate and ten serve as a comparison group for the evaluation. None of the schools had ever reached the fiftieth percentile on standardized tests. The program focuses on all students in the schools.

INTENDED OUTCOMES

- The most frequently cited outcome is to raise the standardized test scores of students to the 50th percentile for those students who are in the school for five years.

- The more broadly stated goal is to "provide students with essential skills to strengthen self-image and academic achievement, enabling students to respond to the demands of a rapidly changing society and to attain excellence in all human endeavor" (Formative Evaluation Report, 26).

PROGRAM COMPONENTS

These elements are common across each school in the program:

- A 20:1 student ratio in grades K–2.

- An extended year component of 19 days is required for all teaching staff and voluntary for students. Teachers continue with their own students from the preceding year, although there is also team teaching built around themes, and there are more field trips.

- An after school tutorial program taught by the regular classroom teacher for lower-achieving students. Children attend once a week; each teacher usually teaches two groups.

- A Saturday clinic (held periodically) following a format similar to the extended year. It is voluntary for both teachers and students.

- Whole language approach to instruction using a literature-based curriculum.

- Supplemental programs such as a Writing to Read Lab for first graders, a School Readiness Development Program for four-year-olds, and Efficacy, a self-improvement program for third graders. The two counselors, bilingual coordinator, and nurse were added in the second year of the five-year program.

- Principals and teachers who were interviewed for their positions and expressed commitment to the school for five years.

- Supplemental professional staff, including a counselor, psychologist, attendance counselor, instructional coordinator, bilingual coordinator, and nurse, each of whom is full-time.

- Supplemental para-professional staff, including half-time or three-quarter-time educational aides for each teacher, library aide, half-time campus aide, and a full-time community liaison.

- Home visit family education program, with one FTE staff person who conducts home visits with families and offers monthly group meetings with participating families.

- School-based parent involvement program one day a week; the coordinator meets with parents on multiple topics ranging from "make and take" to cultural differences in discipline.

- 14 days of teacher staff development each year.

The schools participate in a number of joint activities. A leadership team (composed of the principal and two elected teachers from each school) meets monthly, teacher exchange visits occur periodically, and observation teams composed of principals, faculty, and parents conduct twice yearly evaluations in each school. They also respond as a group to district policy changes.

Evaluation information is available on the 10 schools and their counterparts. The extended year schoolwide program students have consistently outperformed their counterparts in math and language arts, and in grades one and two in reading. For the spring of 1991, the first and second graders topped the fiftieth percentile (in math) for the first time. The two extended year schoolwide projects (SWP) visited are among the top three schools in the program. For example, the first and second graders in Extended Year Schoolwide–B scored above the fiftieth percentile on all three tests in 1991; students' scores were below the twentieth percentile three years ago. Reading scores in the upper grades continue relatively unchanged in each school—neither the extended year schools nor their counterparts have yet raised scores to the thirtieth percentile.

PARENT INVOLVEMENT

A guiding principle of the extended year schoolwide program is the involvement of parents, not only in the education of their own children but also in the quality of the schooling. The full-time community liaison facilitates parent volunteer activities in the school, the schools provide activities for the parents themselves, and five (of thirteen) members on the school-management council are parents. Two separate parent education programs are designed to bridge the gap between the home and the school, through home visits and school meetings.

INITIAL REQUIREMENTS

The initial requirements are substantial. The most critical include (1) concentrated funding to employ additional professional staff, reduce class size, extend the school year, and hire aides; (2) three weeks of staff development prior to the start of school in the fall of 1987; (3) purchase and installation of the Writing to Read computer laboratory; and (4) interviewing principals and teachers for each school. In the spring of 1986, candidates for principal went through a lengthy group interview process, with only experienced principals eligible to apply. Teachers then in the schools had the option to stay or leave, but all had to go through an interview process with the principal, teacher representative and parents. For the first year, only experienced teachers were hired who volunteered to work with these students and who were willing to make a five-year commitment to remain in the school. Some teachers were asked to leave the school; the few who were unwilling to transfer to other schools were allowed to remain.

THE SITES

Extended Year Schoolwide–A is a kindergarten through sixth grade inner-city school with 900 students, with about 90 percent eligible for free or reduced-price lunch. The school occupies a city block. The main building and two wings are two-story cream-painted stucco, with strings of permanent portable classrooms on the playground. Although the school is large, it enrolls more students than it can comfortably manage, with every nook and cranny filled. The student population is now 60 percent Hispanic and 40 percent African-American, an exact reversal of the composition when the program began in 1987. The neighborhood consists of both single family and multi-unit apartment buildings, near housing projects. The families whose children attend the school are characterized either as those who are continually moving in and out, or those who have lived in the area for generations. There is some gang violence, but it is "not rampant."

Extended Year Schoolwide–B is a pre-kindergarten through fifth grade inner-city school with almost 1,100 students, with about 90 percent eligible for free or reduced price lunch. The school campus is very large, occupying almost two city blocks. The main building dates from the 1930s, with two separate wings as well as permanent portable buildings dotting the blacktop. The student population is 50 percent African-American and 50 percent Hispanic. The neighborhood consists primarily of single family dwellings and multi-unit apartment buildings near a core set of housing projects. The school itself is considered a safe and secure place, although youth gangs vandalized classroom buildings last year. In 1990-91, the school was in its fourth year of implementing the extended year schoolwide project.

The seemingly most important difference between the two schools rests with the principals. The principal of the Extended Year Schoolwide–B is now in his sixth year. According to teachers interviewed, he is perceived as very supportive and encouraging of teachers. Extended Year Schoolwide–A, on the other hand, has had four principals in six years, and the most recent principal started in the fall of 1991. The teachers appear weary of the consequences of change in leadership.

In program design and operations, the two extended year schoolwide projects are very similar, as one would expect for two schools in the same district-operated program. There are, however, minor differences in the program components:

- The Extended Year Schoolwide–B school does not offer Saturday clinics, but rather puts those funds into after school tutoring provided by the regular classroom teacher. Extended Year Schoolwide–A offered Saturday clinics for enrichment. Its after school tutoring program is a combination of "clubs" and tutoring, funded separately by the district.

- The Extended Year Schoolwide–B school offers Writing to Read in both English and Spanish, while Extended Year Schoolwide–A offers it only in English. Plans are underway to offer the Spanish version for spring of 1992.

- The original 20:1 ratio in the K–2 grades has risen to a 23:1 ratio, because of district cutbacks in funds. This is true in both schools. Prior to the program, the ratio was about 32:1.

- The 19-day Extended Year component of Schoolwide-A school is departmentalized, with children rotating through the six second-grade teachers over the course of the day. Both academic and enrichment activities are offered. In Schoolwide-B, children stayed with their regular teacher, but were given more enrichment activities than during the regular school year.

Success for All

PROGRAM NAME AND GRADES STUDIED

Success for All (SFA) is a structured and intensive early intervention program designed to "bring at-risk students quickly to a level at which they can profit from high-quality classroom instruction" (Madden, Slavin, Karweit, Dolan & Wasik, 1991, p. 594). The program is intended for pre-kindergarten through middle grade elementary school learners, and has been implemented and evaluated in seven schools in three different districts. The focus in this study is on SFA as it relates to a cohort of students as they progress from grade one through three.

PROGRAM DEVELOPERS

Success for All was developed by a team of educational researchers from the Johns Hopkins University. Nancy Madden, Robert Slavin, and Barbara Wasik hoped to prevent students from falling behind and becoming afraid of school failure—early enough to make a difference. SFA has been implemented in one school for over four years, and in a number of other schools for one to three years.

PROGRAM PHILOSOPHY AND GOALS

SFA defines itself as an approach to instruction that "uses everything we know about effective instruction . . . to recognize and intervene with any deficits that do appear. . ." (Madden et al., 1991, p. 594). By focusing resources on prevention—which translates into developmentally appropriate preschool and kindergarten programs and substantial staff development along with curricular and instructional support for primary grade teachers—SFA hopes students will be successful learners from the start. Its goal is grade-level (or near grade-level) performance for all students in reading and other skill areas by third grade, and higher performance thereafter.

PROGRAM COMPONENTS

Success for All has a number of specific program components, each described briefly below.

Reading tutors. SFA uses certified teachers as one-to-one reading tutors to help students succeed in reading. Typical sessions are 20 minutes. Tutors use the students' regular language arts/reading curriculum as a basis for instruction, and they can also identify areas that need special attention. In addition to the separate one-to-one instruction, tutors work with the regular reading teachers during the daily 90-minute reading periods. While students in grades one through three are tutored, first graders are the highest priority.

Reading program. Students are regrouped each day from their heterogenous classes into homogenous ability groups for 90 minutes of reading. Most groups have between 15 and 20 students. SFA structures the reading periods similarly across levels; each group begins with a story, read by the teacher, followed by a discussion on aspects of reading such as new vocabulary, oral language production and comprehension, and story structure. The reading program builds upon students' experiences as they grow, and students move on to increasingly demanding material. Kindergarten and first grade students focus on basic language development, relying on Story Telling and Retelling (STaR), big books (outsize books that use large print and pictures, some of which are books of the students' making), oral and written composition, and Peabody Language Development Kits. Next is the Beginning Reading program, which introduces phonics while continuing a story-telling component. At the next level, the district's basal series

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is used in concert with cooperative learning strategies to continue students' whole language experiences alongside a more structured approach to language. As part of this module, students are asked to read for 20 minutes each night at home under a parent's supervision.

Eight week reading assessments. Students' progress in the reading program is regularly assessed after eight-week periods. These assessments are used to place students in one-on-one tutoring relationships, to move students to more appropriate reading groups, and to identify students who might benefit from other health or social support interventions.

Preschool and kindergarten. While this feature is not universally adopted by SFA sites, many schools do provide some preschool or kindergarten using SFA principles. The emphasis is on a balance of developmentally appropriate academic and non-academic activities, with a substantial language development orientation.

Family support team. Depending upon the school resources, the family support team is comprised of a social worker, attendance monitor, and other staff in addition to school staff such as administrators, teachers, Chapter 1 teachers, and an SFA facilitator. The team helps involve parents through frequent contact, recruits parents to serve as volunteers in the school community, refers families to other services as necessary, and works to coordinate family-level activities with the school's academic program.

Program facilitator. Each school has a program facilitator (either full- or part-time, depending upon the school resources) who works with the principal to coordinate the SFA model. The facilitator helps plan the SFA program, helps with scheduling, and works directly with teachers and tutors on instructional concerns. Often the facilitator meets with teaching/tutoring staff on a weekly basis.

Teachers and teacher training. Both regular classroom teachers and the reading tutors are certified in elementary, early childhood (for preschool and kindergarten) or reading. All professional staff attend a two-day in-service before the school year begins, and SFA provides a comprehensive set of teaching guides. The curricular content of the in-service varies according to the grade level to be served. Additional in-service presentations are made throughout the year. Tutors spend another day during the year on tutoring strategies and assessment.

Special education. SFA tries to work with special needs students within the context of the regular classroom as much as possible. Tutors, some of whom are special educators, work with individual students.

Advisory committee. Comprised of the principal, the facilitator, a teacher, and a member of the family support team, this group monitors the progress of the program and deals with any issues that arise.

SFA has been evaluated at seven schools. Recent results (*Phi Delta Kappan*, April 1991, 593-599) indicate that on individually administered reading tests, SFA students score higher and are more likely to be on grade level, on average, than comparison students at non-SFA schools (Madden et al., 1991).

PARENT INVOLVEMENT

Parent involvement is a central element of the SFA model. The family support team works closely with parents to keep them apprised of what their children are doing in school, to encourage parents to volunteer in the school, and to suggest strategies that families might use to resolve issues that affect children's education. Parents are welcome to stop by and visit their children's classrooms and school/program staff work to make the school environment more welcoming for parents. In some schools, parents regularly attend and read at "Read to Me" sessions.

INITIAL REQUIREMENTS

The school must make a substantial initial investment. In addition to a significant commitment of resources (money for new positions, materials, staff development, and time), the school must agree to reconceptualize its preschool through grade three curricular priorities, organization and scheduling.

Fidelity to the model over time also requires more funds than are typically available to schools, so school staff must be prepared, and able, to solicit monies from outside sources. The full support of the administration and faculty are essential if the model is to be implemented successfully and effectively.

THE SITES

Both Success for All (SFA) project sites in this study are Chapter 1 schoolwide project schools. *SFA–A* is in an urban northeastern city, and enrolls 550 K–5 students. Nearly 70 percent are recent Asian immigrants, approximately 20 percent are African-American, and the remaining students are White. SFA has been in place for three years. The school has fully implemented SFA in grades kindergarten through three but has concentrated its resources on first grade. All first graders receive one-on-one tutoring if indicated but children in higher grades receive tutoring only as resources allow. As another way to strengthen the first grade program, the school has instituted a transitional or pre-first grade for children who have not had kindergarten or who need additional support before moving into first grade. At the same time that SFA was implemented, the school's configuration changed from K–8 to K–5. The principal encouraged teachers who were not enthusiastic about trying SFA to move with the older grade levels; as a result, she was able to begin the program with teachers who were committed to trying it. Finally, in response to the classroom teachers' request, the principal negotiated some curricular autonomy so that teachers could integrate other materials into the SFA program.

SFA–B is in an urban mid-Atlantic city, and enrolls 450 pre-kindergarten through fifth grade students, almost all of whom are African-American. This school is reportedly the poorest in its city; additionally, the school had the city's lowest test scores in 1988. SFA has been in place here for three years as well. The school implemented the program with fidelity—in part because it was one of the developer's laboratory sites. There have been staff changes since SFA was first implemented, including a change in principal, and new staff have had less intensive staff development and in-service. Staff reported that changes in the student-teacher ratio and in economic circumstances made the program less popular with staff after initial implementation. The daily regrouping for reading instruction ends up taking an unexpectedly large amount of prime instructional time; instead of a 2-to-3 minute transition at each end, the regrouping regularly takes 15 minutes. The regrouping does not always adhere to the homogenous reading level criterion; in some reading groups, there are two distinct reading groups working at different levels. Some classroom teachers also reported using additional enrichment materials to augment the phonetic SFA materials. The principal has endorsed such modifications because she believes that neither SFA nor any other single reading program meets the needs of all children.

SFA–A adopted the model after the principal had conducted extensive research on her own, and she believed that its structure would be particularly helpful to her school's LEP students. Further, the school recognized that its resources precluded full-scale implementation of the program, and came to a decision about its own priorities. SFA–B exercised much less autonomy over the decision to implement the model. Its test scores had forced district-level attention upon the school, and staff feel that the program was imposed upon them from above. The scarcity of resources at SFA–B have also dictated alterations to the model, so that children are not benefiting from the one-on-one tutoring that is deemed central to the effectiveness of the program. Other differences include the level of faculty support and the parent involvement components. Staff at SFA–A are generally more positive and feel they have genuine ownership in the program, while SFA–B staff are not enthusiastic nor universally supportive. At SFA–A, where students may speak any one of several Asian languages, the family support liaison speaks only one language, so the school staff have difficulty communicating with many families. At SFA–B, parents are welcome visitors to the school, and many parents feel comfortable coming into the building.

Schoolwide Suburban/Rural

PROGRAM NAME AND GRADE(S) STUDIED

This school—simply seeing the Chapter 1 schoolwide project as a part of the school—has not given its program a name. The program serves all grades from kindergarten through eighth grade; however, more resources are concentrated in the earlier grades. In both of the suburban/rural schoolwide projects, the Special Strategies study team focused on a cohort which was in the third grade during the 1989-1990 school year.

THE SITE

"Schoolwide-C" serves a 100 percent Native American population in a relatively isolated area. At home the children speak their native language, of which there is no written form. Over 90 percent of the children qualify for free lunch.

PROGRAM DEVELOPERS

The principal, working with the district and state Chapter 1 coordinators and the school's teachers, developed the program. The development process was unusual in that the principal decided in the beginning that simply making Chapter 1 schoolwide, and not making several other categorical funds schoolwide, would be self-defeating. Therefore, the project was not implemented until several Indian education, state disadvantaged and other funds were coordinated under one "schoolwide project" rubric.

During the 1991-1992 school year, the school is re-applying for schoolwide status. This is the school's second three-year application effort. The principal reports that many more teachers are expressing a desire to be actively involved in the development process, having had three years of experience with the first proposal.

PROGRAM PHILOSOPHY AND GOALS

The schoolwide project's philosophy might be described as wholistic and eclectic. It begins with the assertion that all students can learn much more than they have historically achieved. It includes a statement of beliefs in the "Thirteen Characteristics of Exemplary Compensatory Education Programs" and Ron Edmonds' "Five correlates of effective schools." Staff development and parent involvement are seen as central to the process.

The outcome objectives of the project include decreased student absenteeism, increased student self-confidence, and raised student achievement.

PROGRAM COMPONENTS

Among the program's components are the following:

Elimination of pullout programs. Except for speech, hearing, and fairly severe forms of special education, Schoolwide-C has no pullout programs.

Reduced class size. Because the program at this school involved several separate categorical programs all going to schoolwide, the effect was to reduce primary grade class sizes to 16-1.

In-service training program for all staff. In 1989-90, 13 In-service workshops were held. The goal is to improve teaching skills in the following areas: teaching language arts through the content areas, development of higher order thinking skills, learning environment and multi-sensory learning, whole language reading techniques and the writing process, learning centers, teaching styles and learning styles, and assertive discipline. In 1990-91 there were 18 district-wide half-days of In-service plus several whole days of school-based In-service.

Incentive program for achievement and attendance. The principal awards certificates and prizes at assemblies, with parents and families invited to the ceremony. Before the schoolwide project was implemented (1987-88), students averaged 13.1 days absent. In 1988-89, they averaged 8.7, and in 1989-90, 7.3.

Money for classroom supplies to be used as individual teachers see fit. Teachers everywhere are used to taking money out of their own pockets to buy materials for their classrooms. Under the schoolwide project, $100.00 per year is allocated to each individual teacher to spend as she or he pleases.

Staff reorganization into "departments" by grade. The four third grade teachers are now working together in new ways, sharing skills and resources and restructuring class time. Other "departments" are reporting similar collaborations.

Computer-assisted instruction. All students use a networked IBM PS/2 Jostens setup that allows students to progress at their own speed in reading, writing, and math.

Exxon Educational Foundation program. Ten teachers from the local school district were chosen by Exxon in a competitive selection process. One of the school's third grade teachers participates in the program. During the both the summer and regular school year, the teachers attend calculus and other math courses, as well as attending discussion sessions. The foundation also paid for math manipulatives. Title II pays for additional teacher training and manipulatives.

The Young Authors Program was developed by teachers and funded by the principal at a teacher's request (out of the general budget). This is about $300 per year. Students learn how to make books, from generating ideas, writing, illustrating and dedicating a story, to publishing and distribution.

Summer program. For the past two years, the school has hosted a four week summer school for students in danger of falling behind. The principal serves as the summer school principal for no additional pay.

Many of these components were immediately popular with the teachers. Examples include the elimination of pullouts, reduced class size, and increased paid staff development activities. Others have proven popular with students; examples include the achievement/attendance incentives and the young authors program.

The reorganization of school governance structure is an ongoing process.

PARENT INVOLVEMENT

Each teacher is required to conduct Parent Days during which parents and other family members are invited into the classroom to take part in activities. A third grade teacher is implementing an after school Family Math Program for students, parents and other family members. Parent meetings with a specific topic are held monthly. Parents are encouraged to pick up report cards every quarter and meet with their child's teacher. Last year about 80 percent of the parents did this. For fall 1990 and 1991, teachers distributed the first report cards to parents during parent-teacher conferences held not at the school but in the village.

The schoolwide project includes two school-community para-professionals.

INITIAL REQUIREMENTS

In addition to receiving Chapter 1 funds, the school has benefited from Chapter 2 funding, Title V, Johnson-O'Malley, state bilingual funds, Drug Free Schools and Communities, PL-874, an Exxon Foundation grant, and a business partnership. The project could have begun with only Chapter 1 schoolwide funding, but the additional sources have proven valuable.

THE SITE

Schoolwide-D serves a 100 percent African-American population in a suburb of a large Southern city. Almost all of the children qualify for free lunch.

PROGRAM NAME AND GRADE(S) STUDIED

The school has not given its program a name, simply seeing the Chapter 1 schoolwide project as a part of the school. The program serves all grades in the school, from kindergarten through fifth grade, with somewhat more resources concentrated in the earlier grades. At Schoolwide-D the Special Strategies study team focused on a cohort which was in the third grade during the 1989-90 school year.

PROGRAM DEVELOPERS

The first germ of an idea for the school's project began at a state Chapter 1 meeting which included a Technical Assistance Center (TAC) presentation on this new option. The district's Chapter 1 coordinator enthusiastically brought the idea back to principals of his schools serving more than 75 percent free lunch students. The district offered supplementary resources as an incentive. Two principals responded favorably.

The principal worked with the Chapter 1 coordinator and a volunteer sample of faculty, staff, and parents to develop the project. The school began with an assessment of its strengths and weaknesses (using the "13 Characteristics of Effective Compensatory Education Programs" and other related findings from research on teacher- and school-effects.) They targeted both reading and math, identified needs, and cross-checked their perceptions with a comprehensive review of test data.

PROGRAM PHILOSOPHY AND GOALS

The school's proposal states, "The purpose of the [Schoolwide-D's] Innovative Schoolwide Project is to maximize achievement and minimize failure for all students enrolled in the school." The proposal further states that "a strong academic focus will be pursued in every classroom through high expectations for student achievement, maximum engaged time, high student success rates and careful monitoring of student performance. Various methods of direct, interactive teaching will be utilized in reading and mathematics."

The principal states her main goals were to give the school a unified focus and plan. She saw the schoolwide option as an opportunity to eliminate pullouts, thus reducing the number of children "in the halls, under the portables, and so on." She also correctly understood that the district was offering additional resources as an incentive for schools, and she perceived that her students needed things those resources might purchase. In addition, she reported she wanted an overall emphasis on quality instruction recognizing students' individual learning styles.

PROGRAM COMPONENTS

As was the case with Schoolwide-C, the program at Schoolwide-D has many components: Reduction of class size and elimination of pullouts, inclusion of all students in the Chapter 1 program, providing a strong, unified academic focus (successful instruction is determined by higher scores on standardized tests), multi-media approach to instruction, computer assisted instruction, music, art, and physical education instruction, schoolwide classroom management/student behavior plan, student and family counseling and Chapter 1 nursing services, and extensive professional development.

PARENT INVOLVEMENT

The project proposal states that, "The final area of improvement to be enhanced by the Chapter 1 innovative schoolwide project will be related to 'out-of-school' support for students." Extensive parent involvement in the school is a long-range goal at the school; however, the immediate goal addressed in the proposal was to strengthen the home environments of the students in regard to schooling. Several members of the staff expressed the opinion that parent involvement will require additional attention during the project's second three-year cycle.

INITIAL REQUIREMENTS

The school simply used their existing Chapter 1 funds in conjunction with additional Chapter 1 funds offered by the district as a reward for bold action. The active support of the district's Chapter 1 coordinator, and the energetic steps taken by the principal were additional resources without which the program probably would not have begun.

COMPARISON SUMMARY

The two suburban/rural schoolwide projects share several common characteristics:

- both are located in very disadvantaged school districts and communities,
- both eliminated pullout programs,
- both reduced class sizes, especially in the primary grades,
- both upgraded their instructional computer facilities,
- both greatly expanded schoolwide staff development,
- both increased procurement of much-needed instructional materials, and finally,
- both have principals and local Chapter 1 coordinators who could be described as "educational leaders."

Program Descriptions

Adjunct Programs

Reading Recovery

PROGRAM NAME AND GRADES

Reading Recovery is an early intervention program designed to reduce reading failure. It is a one-on-one tutoring pullout program for first grade students who are experiencing difficulty in learning to read.

PROGRAM DEVELOPER(S)

Reading Recovery was developed and studied initially by New Zealand educator Marie Clay. In the United States, Reading Recovery training is sponsored by Ohio State University. Dr. Gay Sue Pinnell of Ohio State has been instrumental in implementing Reading Recovery in the United States.

PROGRAM PHILOSOPHY AND GOALS

Reading Recovery is based on the idea that intensive, high quality intervention in the first grade is a cost-effective strategy for preventing long-term difficulties and reading failure. The goal is to intervene with the child who is experiencing difficulty early on before a pattern of failure and frustration has set in. Poor readers develop ineffective strategies early on, and the Reading Recovery sessions help children develop effective strategies in reading. Children are discontinued from the program when they are judged to be able to perform at the average reading level in their classroom.

PROGRAM COMPONENTS

Program operation. Students are selected into Reading Recovery on the basis of a variety of criteria, including standardized tests, the Diagnostic Survey (Concepts About Print, Alphabet Knowledge) and other early literacy assessments.

The tutoring sessions in Reading Recovery are conducted one-on-one with a trained Reading Recovery teacher. The daily sessions last about 30 minutes. The emphasis is on developing strategies which will help children recover from their reading difficulties. The first two weeks (ten sessions) of Reading Recovery are called *roaming in the known*. These two weeks are used to establish what the children know and serve as a base for developing instructional strategies.

After this initial period, each Reading Recovery session has a similar format. It begins with taking problematic words to fluency. Then, the child re-reads two familiar books, with the teacher emphasizing fluency and the use of strategies when the child experiences difficulty. The reading of a third book is used to create a running record of the child's accuracy. After reading, the teacher goes back over the record with the student, asking such questions as, "What did you do here?" or "How did you know that?" or "Show me the tricky part." In this portion, the teacher emphasizes the use of appropriate strategies for dealing with particular difficulties.

After the running record, the child dictates a sentence story to the teacher. The child-generated sentence will be the basis for a writing activity for the child as well as a part of the homework assignment.

The teacher provides an extensive introduction to the fourth book, which is new to the child that day.

At the end of the session, the child is given a packet to take home which includes a copy of the student-generated writing as well as a story to be read at home.

Students may be discontinued from the program when they are performing at the average level of their class. Some students spend a short period of time in the program, while others may be there for the balance of the school year.

STAFF DEVELOPMENT

Staff development for teachers involves participation in a year long In-service program. As teachers participate in training, they also implement the program with their children. The trainer (teacher leader) critiques and evaluates the performance of the teachers in training in live sessions with their children both at the regular school setting and at the training facility (using a one-way mirror set-up).

Because the teachers in training need to be participating in the training year both in training and in their regular teaching, classes conducted by a certified Reading Recovery teacher leader must be at a reasonable distance from the school. Becoming a certified teacher leader involves a year's intensive training at a training site, such as the one at Ohio State or at several other locations around the country.

PARENT INVOLVEMENT

Parents are invited to come visit the school to see a Reading Recovery lesson in operation. In addition, materials are sent home nightly with the child to share with parents. These include the readers (mini-books) and the sentences (composition of the child).

INITIAL REQUIREMENTS

To begin the program, a school must have access to a trained, certified Reading Recovery teacher leader. The school must also have extra teaching spots allocated as Reading Recovery teachers may spend from half to all day tutoring students, depending upon the school's arrangement. For example, a full-time Reading Recovery teacher may tutor four students a day in Reading Recovery sessions and teach small group Chapter 1 classes for the balance of the day. Materials such as the Diagnostic Survey and mini-books (about 700 of them) are needed, and additional space to conduct the tutoring sessions are required.

THE SITES

The two Reading Recovery sites, RR–A and RR–B, are both located in U.S. rural/suburban areas.

RR–A school is a K–5 school with 385 students. It is about 20 percent African-American, and about 75 percent Chapter 1 eligible. The district is invested in Reading Recovery at all schools (even non-Chapter 1 schools have a Reading Recovery teacher). The city is in the midst of a significant economic decline. Once a relatively stable community with healthy small industry, the city continues to lose population and jobs. About ten years ago, the school population was 10,000; today it is about 6,500.

RR–B is a K–5 school with about 530 students. The school has 49 percent reduced and free lunch students. The population is primarily White. Many parents of Chapter 1 eligible students are the working poor, those employed but still below the poverty level due to low wages. The economy is shifting from one based primarily on mining and lumber to tourism. RR–B has had an extremely high growth rate in the school-age population in the last 10 years. The population in the city itself has doubled in the past 10 years. The population growth, coupled with the directive to keep class size below 25 students, has created significant space problems in the schools. The elementary school for RR–B has two portable classrooms to alleviate overcrowding. Reading recovery is also widely used in the district in which RR–B is located.

COMPARISON SUMMARY

The operation of the Reading Recovery program with respect to the instructional aspects of the program are highly similar in RR–A and RR–B. The major difference in program operation was the way in which the programs were structured in the two sites. In RR–A, two teachers had received training in RR. They team taught the first grade. One teacher taught the entire class in the morning and did RR in the afternoon, while the other teacher did RR in the morning and taught in the afternoon. In the other site, there were also two Reading Recovery teachers. They, too, had other responsibilities so that they did not carry out Reading Recovery lessons all day. One taught classes of Chapter 1 students (not in Reading Recovery), while the other was a teacher leader.

Computer Curriculum Corporation

PROGRAM NAME AND GRADE(S) STUDIED

The program described below is the *Computer Curriculum Corporation* (CCC), which designs educational software for computer-assisted instruction. The program is intended for elementary through adult-age learners, and has been implemented in school and employment-training settings. The focus in this study is on CCC as it relates to a cohort of students as they progress from grade three through five.

PROGRAM DEVELOPER(S)

Computer Curriculum Corporation was founded by Patrick Suppes and Richard Atkinson to learn more about ways that computers can promote student learning and achievement. CCC has been researching, developing, marketing, and supporting educational software for over two decades. The company's first computer-assisted integrated learning system, introduced in 1968, provided instruction simultaneously to 16 students. Currently CCC provides instruction to nearly 750,000 students.

PROGRAM PHILOSOPHY AND GOALS

CCC defines itself as an "integrated learning system that assures results." The philosophy underlying the software emphasizes immediate feedback, positive reinforcement for student achievement, and tutoring when necessary—all tailored to the performance level of the individual student. Students can achieve mastery of several different subject areas (reading, language arts, math, science, basic competency and computer literacy, and science); the subject areas or sub-areas are selected by the school district to best match the district's curricular goals. CCC is intended to augment a school's regular course offerings with its extensive student-paced academic practice. By spending regular and frequent time on-line, students can improve their academic and test achievement. CCC assumes that all students can master a particular subject, given daily (or other high-frequency) time-on-task, and that increased achievement test scores will follow.

CCC describes its courses as effective for all levels, and for a diverse population of learners, ranging from Chapter 1 or other at-risk to gifted and adult basic education learners. In addition to the improved academic performance that can result from CCC, the program claims to bolster students' self-confidence and self-esteem, introduce students to computer technology, and challenge students to use higher-order thinking skills.

PROGRAM COMPONENTS

The various elements of CCC's integrated instructional system include assessment, monitoring, feedback, and record management as well as specific subject area software packages. Typically CCC is set up in a dedicated computer lab staffed by trained para-professionals. The software is designed to complement schools' curricula and help them reach achievement and testing objectives. Audio packages are available for use with Limited English Proficiency (LEP) or low literacy learners. CCC uses commercially available hardware and a variety of software options. The components are described briefly below.

Assessment and performance targets. CCC proposes to achieve its goals by providing one-to-one on-line instruction for students. Depending upon a district's curricular and test performance objectives, students are expected to complete a given number of computer sessions over the course of an academic year. At the beginning of an academic year, students are assessed with a set of questions; depending upon the student's performance and the school's goals, the initial assessment provides an estimate of the number of sessions required for the student to demonstrate mastery. That estimate then translates into a specified number of minutes on-line for each of the target subject areas, as in 11 and 13 minutes a day, respectively, for math and reading. CCC also provides extensive performance reports, available for each subject area at the individual student, class, and grade levels. Districts can choose daily, weekly, monthly, or other reporting formats for monitoring of student progress.

Subject area offerings. Each subject area contains a number of "strands." Mathematics, for example, in the (primary) elementary grades, includes strands (which in turn have sub-skill areas, and within those, mini-sessions) on measurement, geometry, addition, number concepts, subtraction, fractions, equations, applications, multiplication, problem solving, science applications, word problems, and division. Other subject areas, similarly organized, also provide sophisticated drill and practice on strands and sub-skills.

Immediate feedback and positive reinforcement. Students log on by name and unique identification number; questions are calibrated to begin at the difficulty level mastered at the student's last session. During a typical third or fourth grade reading session, students are asked between 18 and 25 questions about vocabulary, comprehension, inference, and grammar, among other sub-skills. A math session generally has a few more questions (22 to 30 questions). Correct answers are rewarded by colorful displays of fireworks, ribbons, or other positive visual feedback. Incorrect answers are followed by an encouraging phrase, often using the student's names (such as, "Try Again, Marty"), and a second incorrect response is followed by the right answer along with a demonstration of the correct solution. Students can ask for on-line tutorial assistance if they are unable to answer a question. At the end of the session, the computer indicates the number attempted, the number and percent correct.

Extensive research documents CCC's effectiveness. One Maryland school district moved from eighth to third in state achievement over a several year period. Schools in Milwaukee, Wisconsin, and Fort Worth, Texas reported a doubling of gains among low-achieving students (from .7 to 1.4 grade-years per academic year of CCC); in a Pensacola, Florida school, 348 of 374 potential dropouts stayed in school *and* gained a year and a half in all basic skills (with one year of CCC). Other evidence of effectiveness includes certification of effectiveness by the U.S. Department of Education (National Diffusion Network) and many state awards.

PARENT INVOLVEMENT

Parent involvement is not an explicit objective of CCC.

INITIAL REQUIREMENTS

A school district must make a substantial commitment in order to implement a CCC installation. Because CCC offers a variety of software, the district must first evaluate its own goals and curricula in order to select subject areas that would be appropriate. If math achievement is a particular concern, for example, a district may select only the math software options. The district must purchase hardware (CCC is currently developing software that is other-hardware compatible), lease software (called courseware), dedicate climate-controlled space(s), train paraprofessionals to staff a lab, and conduct initial training for teachers and administrators. Additionally, the district must be able to continue to budget resources for annual maintenance and software upgrade service contracts (in some cases, 20 percent of the original cost), and for refresher staff development training.

THE SITES

CCC–A is an upper grades (4–6) southwestern rural school with approximately 600 students. (Last year the school was a 3–5 school.) The student body is 98 percent Spanish-speaking, although many students enter school speaking English as well. The district is located on the U.S.-Mexico border and is populated by a large number of migrant farm workers. As a result, the school's enrollment fluctuates according to the presence of the migratory workers; it is highest between mid-November and mid-March. In this school CCC is available schoolwide, and whole classes, accompanied by their teachers, attend the 48-station computer lab every day for 30 minutes. Students spend the first 13–15 minutes on reading, and then work on math. The two-room lab (which accommodates two classes at once) is staffed by two para-professional proctors who monitor students' performance and help resolve questions.

CCC–B is a K–5 school in a small town in the southeast. It serves students who are among the most disadvantaged in the county. The school is resource-poor and overcrowded, and several classrooms are in portable units at the rear of the campus. The student body is approximately 60 percent African-American and 40 percent White. Students attend the eight-station lab for 15 minutes a session, traveling independently from their classrooms to the lab and back, whenever their lab time is scheduled. The school tries to schedule consecutive sessions for those students who attend for both subjects, but such scheduling is not always possible. Some students attend just for reading, some just for math, and some both. Depending on when students' sessions are scheduled, they miss regular classroom instruction in language arts, math, social studies, or science; in classes where a number of students come and go routinely, children are expected to fend for themselves once they return. The lab is staffed by a para-professional proctor who monitors children's performance and helps them when necessary. Teachers are ambivalent about CCC, however. Many appreciate the improvement in students' self-confidence and academic performance, but many are also frustrated with the disruptions caused by students' travels to and from the CCC lab at different times.

COMPARISON SUMMARY

In CCC–A, the program has been in place for three years, and in CCC–B, for five years. The two labs look different (one has 8 terminals; the other 48). At CCC–A, students arrive accompanied by their teachers and all their classmates, and consequently coordination with the regular classroom instruction is not a problem. At CCC–B, because CCC functions as a pullout, students miss 15 to 30 minutes of regular instruction a day, and students from the same class do not necessarily attend the lab at the same time. Here coordination is a real issue. The CCC students at CCC–B are either Chapter 1 students, students whose achievement test scores fall below state-determined criteria, or students teachers believe need special remediation. The two districts use different funding sources as well. CCC–A used a combination of Chapter 1-Regular, Chapter 1-Migrant, state compensatory and bilingual education monies to purchase equipment and implement the program, and current costs are shared by Chapter 1-Regular and Migrant. CCC–B drew upon state compensatory education funds to implement the program, and the district continues to use such funds to operate the program. Despite these exogenous factors, once students have logged on, the computer-assisted instruction itself is identical: sophisticated drill-and-practice sessions in reading and math. Students sit in front of terminals, and proceed through a set of reading or math questions and problems. Both districts adopted CCC because they believed it would improve students' academic and test performance, and both districts opted for similar courseware. In general, administrators at both sites are quite pleased with CCC. In fact, the CCC–B principal plans to purchase a ninth station using the school's discretionary Chapter 2 monies.

Tutoring

Peer Tutoring and METRA

PROGRAM NAME AND GRADES STUDIED

Two of the special strategies are tutoring programs. One uses METRA, a commercially available and highly structured tutoring system in reading, math, and English-as-a-second-language that combines one-on-one tutoring with companion instructional materials for use within the classroom. The other tutoring program combines peer and cross-age reading tutoring activities with self-contained Chapter 1 first-grade classrooms, listening centers, and precision teaching. For both programs, our focus is on a cohort of students as they progress from grades one through three.

PROGRAM DEVELOPERS

METRA, developed by Grant Von Harrison and colleagues, is a structured learning system for students having difficulty mastering early reading, math, and language skills. The developers train new users. The peer and cross-age tutoring combination was developed by professional staff from the local school district with assistance from faculty at a nearby university. The district's approach to peer tutoring is based on the Juniper Garden classwide peer tutoring programs developed at the University of Kansas. The cross-age tutoring is loosely based on methods developed by the Intercultural Development Research Association for its Coca-Cola Valued Youth Program. Precision teaching was also refined by university faculty working with Chapter 1 professional staff.

PROGRAM PHILOSOPHY AND GOALS

METRA is an instructional system aimed at improving students' skills in reading, math, and English-as-a-second language. Because it is low in cost, yet thought to be effective in helping students master basic skills, METRA appeals to school districts struggling to use financial resources as economically as possible.

The peer and cross-age tutoring effort grew out of district staff belief that the academic performance of low-achieving children could be improved with these approaches and that the instructional delivery system could be made more efficient. Further, the emphasis on the early grades represents a district decision to focus on helping the youngest children attain grade-level skills in reading and language arts. Both districts hope these tutoring approaches will lead to improved standardized test scores among Chapter 1 students.

METRA PROGRAM COMPONENTS

The METRA tutoring program employs para-professional aides, trained by the district Chapter 1 coordinator, who was trained by METRA professionals. METRA has been evaluated and recognized through the U.S. Department of Education's National Diffusion Network. Specific program components are briefly described below.

Tutoring on reading skills. Chapter 1 tutors use a guidebook, *A Professional Guide for the Lay Tutor* (Von Harrison, 1979), during their thrice weekly sessions with individual students. The goals are to help children improve their reading skills and achieve grade-level reading proficiency. During their 15 minute sessions, students sound out new words, practice blending sounds, practice new sounds, and read words and sentences using real and nonsense sounds. Tutors lead children through the phonetic exercises and correct children's mistakes immediately.

Tutoring on reading comprehension. Twice a week for 15 minutes a session, tutors work with children to improve their comprehension skills. Students read words, phrases, and sentences silently and then answer a series of questions. Tutors immediately correct mistakes. When students have correctly answered at least 80 percent of the questions, they move to a more difficult reading level.

Independent reading combined with directed instruction. Two or three times a month, either individual students or small groups of students read a story together, taking turns reading aloud. The stories are from *Top-Shelf Literature* (Higgins, 1989). Tutors then ask students questions to test their comprehension of the story.

Tutoring on math skills. During 15 minute sessions, five days a week, one tutor works individually with some children to improve their mathematical skills and comprehension. METRA materials and techniques are used. The lessons range from simple addition and subtraction to complex multiplication and division. As children progress, they are tutored on decimals and fractions.

PEER AND CROSS-AGE TUTORING PROGRAM COMPONENTS

The components of the peer and cross-age tutoring approaches vary by grade level. Each is described below. All tutoring approaches include weekly pre- and post testing to measure student progress. Individual student progress is further monitored through review of scores on standardized pre- and post-tests.

Classwide peer tutoring. Each week, each first-grader is assigned to a team and, within the team, is paired with another first grader. Students work on spelling and reading, taking turns as tutors and learners in 10 minute segments during the 30 minutes classes spend in classwide tutoring sessions. The tutor keeps track of the number of correct answers within each pair, and the teacher totals correct answers for each team. Daily and weekly recognition goes to the winning pairs and teams.

Listening center activities. Twice a week low-achieving first grade students spend 30 minutes in "Listening Center" activities supervised by a para-professional Chapter 1 aide. Using audiotape stories, directions, and worksheets in a structured and sequential program, students work to improve their listening and oral comprehension skills.

Cross-age peer tutoring. Fifth and second grade Chapter 1 students participate in cross-age tutoring four times a week under the supervision of Chapter 1 aides. Fifth graders tutor second graders in reading and comprehension skills. The older students monitor responses to questions, provide corrective feedback, check reading comprehension, and award points to the second graders they are tutoring. On the fifth day of each week, fifth graders plan their tutoring sessions for the second graders and are tested on their reading and comprehension skills.

Para-professional tutoring. Chapter 1 aides, using a variety of phonetic and reading comprehension materials, tutor third and fourth graders. This daily tutoring is a traditional pullout activity which employs Siegfried Engelmann's method for direct teaching to reading mastery. Tutoring sessions typically last 30 minutes.

Precision teaching. For cross-age tutoring and direct teaching as well as in some classrooms, paraprofessional tutors and teachers use "precision teaching," a technique that uses one minute reading aloud assessments of students. The number of words read and the number of errors are entered into a computerized data base and analyzed. The computer program not only provides a measure of student progress but also indicates topics on which future tutoring sessions should focus.

PARENT INVOLVEMENT

Parents of potential METRA participants (Chapter 1 eligible students) are sent letters at the beginning of the school year signed by the district Chapter 1 coordinator and the tutor who will be assigned to that child. Two parent-tutor conferences are held each year; the first is coordinated with the regularly scheduled parent-teacher conferences in the fall, and the second occurs in mid-spring. Tutors try to accommodate parents' scheduling preferences. METRA tutors also send home periodic progress reports when students have completed units of work.

In the combined tutoring program, parents of Chapter 1 eligible children receive introductory letters and are asked to sign permission forms. Also, at the beginning of each school year, the district sponsors a meeting for parents where administrative staff offer an overview of the Chapter 1 program along with a presentation on the importance of reading improvement. Chapter 1 aides are available for conferences during regular parent-teacher conferences. Quarterly progress reports are sent to parents.

District-level Chapter 1 staff prepare newsletters for parents and help building-level staff maintain libraries for Chapter 1 parents. In addition, one week each year is "open classroom" when parents can come to school with their kids, attending all classes, especially Chapter 1 sessions.

INITIAL REQUIREMENTS

For METRA, the district or school must make a moderate initial investment by purchasing the requisite tutoring materials and training a district-level supervisor. Tutors must then be trained as well. Additionally, the school must schedule tutoring sessions and set aside space for the tutors.

The initial requirements for the combined tutoring approaches are modest, and depend upon the district or school goals and resources. The classwide peer tutoring requires initial training of teachers in grouping strategies; it also requires materials for teams to use in tracking correct answers. The cross-age and para-professional tutoring requires similar materials. Reading materials, such as the Juniper Garden series, must also be purchased. Chapter 1 aides must be trained as well. The listening center component requires audiotapes, audio equipment and reading worksheets.

THE SITES

Tutoring–A has had METRA in place for over 10 years. The initial decision to implement was based primarily on METRA's low cost. All six of the district's elementary schools use METRA; however, one of these schools is not Chapter-1 eligible, and its program is funded with state compensatory education monies. The school is in a small city about 40 miles from the state capital in a rural southern state. There are 500 students in the K–5 school and approximately 26 percent of the students are eligible for school meals. There are three METRA tutors serving the 57 Chapter 1 students, including 10 first graders (in 1990-1). The student population is 82 percent White and 18 percent African-American. The tutors are para-professional aides who had previous experience in the district schools, typically as Chapter 1 or classroom aides. School staff decided six years ago to augment the structured reading materials provided by METRA with more literature-based materials because both students and tutors were bored with the METRA materials.

Tutoring–B has had its combination of approaches in place for two years—although peer tutoring has been used since the early 1980s. All of the district's schools use some combination of tutoring strategies, and most Chapter 1 first graders are grouped into contained classrooms. The Chapter 1 classes have classroom aides and a maximum of 21 students. There is one Chapter 1 first grade class at this school. The school district serves children in a small college town in a western state. The school is located in a deteriorating middle-class section of the town and contains 500 students in kindergarten through fifth grade. During the 1990-91 academic year, 21 percent of the student body was eligible for free or reduced-price school meals. The Chapter 1 program serves 86 students in this school.

COMPARISON SUMMARY

Although the two schools are similar in size and composition, their tutoring programs are quite dissimilar. Differences between programs include the following distinctions: METRA was imported from outside the district while the combined program was developed by the LEA; the instructional delivery systems differ; Chapter 1 first graders are in self-contained classes at one site while at the other site, only retained first graders receive Chapter 1 services in a traditional pullout program; in the combined program, type of tutoring varies by grade level whereas METRA is offered to all elementary grades.

Extended Time

Chapter 1 Club

PROGRAM NAME AND GRADES STUDIED

This extended time program is called the "Chapter 1 Club." The program uses age-appropriate books as a basis for student development of language skills, and is held daily for 30 minutes after the school day ends (2:30—3:00). The program is open to primary grade students in grades one to three; however, it is voluntary. We are following a cohort of students as they progress from first through third grade.

PROGRAM DEVELOPER

The Chapter 1 Club was developed during the 1988-89 school year by the lead teacher, who also serves as the principal in this school. The principal was dissatisfied with the existing pullout programs, and she was interested in developing a program that would involve less structure while still promoting learning. Additionally, the principal wanted to use the school's instructional aides more efficiently.

PROGRAM PHILOSOPHY AND GOALS

According to the principal, there was not a particular research model used to develop the Chapter 1 Club. She envisioned instead a program that emphasizes and reinforces the importance of reading while trying to make that objective enjoyable, social, and desirable to the students. The intended objectives are to improve reading ability, foster a desire to read, and to increase self-esteem and social skills. The program is open to all Chapter 1 eligible students (that is, students whose CTBS achievement test scores meet state-determined criteria) whose teachers recommend their participation. The principal and teachers make joint decisions regarding the children they feel would most benefit from the extended day program. This process has worked to keep potentially disruptive students out of the program.

PROGRAM COMPONENTS

The Chapter 1 Club generally follows a sequence of events. Every two to three weeks a new book is selected that helps structure the reading, writing, and project-based activities for that period of time. The sequence of these two-to-three-week units is described briefly below.

Introduction to the book and reading comprehension. The children meet in the school's library, where the librarian (who serves as the head teacher for the program) reads a book aloud to the entire group from the three grades and, with the help of the aides, asks questions about the story. They also ask the students to name words that they remember from the story and these words are written on the blackboard by one of the aides.

Writing. The following day, each grade meets separately and begins the writing phase of the program. The aides usually introduce a general topic related to a theme from the story and students are instructed to begin writing a story about the topic. The list of words from the previous day is displayed in the room as a way to help students with their spelling and to encourage them to use the words in their stories. The children spend four days on the writing component: two days of writing, one day rewriting and revising, and one day creating a picture to illustrate their stories. In addition to their story, students write about related projects such as sewing, cooking, puppetry, arts and crafts, plays and special project-related field trips (described below).

Related projects. The final phase involves activities or projects that are related to the story. The projects have included a variety of media such as painting, sewing, sculpture and music. One project was the sewing of American flags undertaken after the children read books about Betsy Ross and the origin of the U.S. flag. Each participant hand sewed a flag that was approximately 36" x 18" in size.

The school has also recently began experimenting with a cross-age tutoring program in both the regular classroom and in the Chapter 1 Club. Under the program, fifth grade students from the neighboring middle school tutor students who are having trouble reading, regardless of whether the student is Chapter 1 eligible. One fifth grade student tutors children in the first and third grade Chapter 1 Club, alternating between the grades on four afternoons each week. After the current school year, the school principal and her teaching staff will discuss how to proceed with the tutoring program.

Although no formal evaluation of the Chapter 1 Club has been conducted (aside from a state-mandated evaluation of the school-wide Chapter 1 program), a number of informal assessments of the extended day program are ongoing. The principal and instructional aides monitor the extended day program for program effectiveness and informally discuss the self-esteem and social development of Chapter 1 Club members. The instructional aides and principal also discuss student participation and the program's curriculum both on an ongoing basis and at an annual review of the program which is held at the end of the school year. Portfolios of student writing are compiled each month and evaluated annually by the principal, staff and program instructors. A parent survey will be distributed this spring to evaluate their opinions of program effectiveness.

PARENT INVOLVEMENT

Parent involvement is very limited but not discouraged, although parental permission is required for participation in the program. The importance of parents to learning is acknowledged by program staff, but parents are not involved in activity planning or in daily operations of the program. The principal holds regular meetings with Chapter 1 parents but believes she needs more parental involvement. Much of her effort in the past two years has been spent "just getting the program up and running." Certain program activities have generated considerable interest in, and support for, the Chapter 1 program, however, and she hopes future activities will continue to build parent support. Parent Day programs featuring plays, puppet shows, and project displays are well attended by parents.

Parent outreach in the school district involves school site councils, bilingual site councils, district advisory council and a strong migrant parent group. Parenting classes and a migrant Even Start program for pre-school children and their parents was initiated in the district in January 1992. The district's emphasis on parent involvement in these councils and programs is a strong motivation for increasing the level of parental involvement in the extended day program.

INITIAL REQUIREMENTS

The initial requirements to develop a program like the Chapter 1 Club are minimal. The program requires no formal staff training and can be implemented with a limited amount of start-up resources. Program staff believe that one of the strengths of the program is that they are able to provide something extra for the children on a relatively low budget.

THE SITE

The *Extended Time–A* Chapter 1 Club is offered in the only elementary school in a small (pop. 2,300) rural agricultural town. The primarily Hispanic community lies about 50 miles north of the U.S.–Mexico border; 85 percent are of Mexican-American heritage, and many are monolingual Spanish speakers. The balance are White with a handful of African-American and Asian families. Currently there are 99 children identified as Chapter 1 in grades 1–3. Of these, 65 children participate in the program. School staff are generally satisfied with the program's present structure, and hope to work to make it an ongoing and positive learning experience for the participants.

Extended Time

Summer Migrant Program

PROGRAM NAME AND GRADES STUDIED

The program described below is an extended time program that operates during the summer, providing services to the district's settled out migrant students as well as to summer migrant students. The majority of the summer program participants do not attend the same school during the regular academic year, although a number attend elsewhere in the district. The eight-week program is open to all eligible pre-kindergarten through second grade students (who must meet federal migrant education guidelines), and it runs from mid-June through mid-August. We are following students as they progress from third to fifth grade.

PROGRAM DEVELOPER

The summer migrant program was developed in 1990 by the principal, then in his first year as an administrator. He wanted to start a summer migrant program because the district has a substantial migrant population, especially during the summer. The program serves the special needs of children of migrant farm workers who live or work in the rich agricultural area surrounding the school.

PROGRAM PHILOSOPHY AND GOALS

According to the principal and program director, there are two key objectives. The first is that the program increase children's mastery of basic skills, primarily English and math. The intent is to provide migrant children with a foundation in basic skills that will then enable them to perform at grade level in whichever school setting they are enrolled in the regular school year. The second goal for the summer program is that children enjoy the experience. The staff want children to learn through doing and to help build positive associations with schooling so that children, and their families, will want to continue to pursue their education. By including lots of physical education, play, athletic activities, music, art, and field trips, the principal believes that the program will help children enjoy learning.

PROGRAM COMPONENTS

The summer migrant program begins with a needs assessment, and once students have been placed, there is an instructional and a health component. Each is described briefly below.

Needs assessment. Incoming students are assessed in several ways. Student and parent interviews, teacher observations, test performance on a norm-referenced test (the Wide Range Achievement Test-Revised (WRAT-R)), a criterion-referenced test, and data from the Migrant Student Record Tracking System (MSRTS) are all used to place students in an appropriate classroom and grade level.

Instruction. The instructional model is based on that used by classroom teachers during the regular school year, and it consists of two parts for all grade levels served. Mornings are devoted to instruction in the core subjects (reading, language arts, and math). Three afternoons a week are spent on one of several specialty areas such as art, music, or computers. One afternoon is spent on swimming skills, and the remaining afternoon is used for educational field trips. There is no coordination between the summer program staff and the regular staff.

The reading/language arts instruction consists of phonics, vocabulary, spelling, and reading. There is no writing in the program. Delivery is traditional teacher-centered, with teachers leading students in drill-and-practice on phonics and reading comprehension.

Math instruction also utilizes drill-and-practice with children working in workbooks; eight different workbooks vary by skill level. The instructional content consists primarily of computational problem solving.

Older students who help their families by working in the orchards can also participate in the program. These students are given packets of materials in English and math to work on in the evening. These students can earn instructional hours that count toward a high school degree.

Health services. Five days a week, students are fed breakfast, lunch, and a snack at the school. Meals are healthy. The provision of two meals a day relieves many migrant families of the burden of feeding their children. Children also receive free medical, dental and public health care by the county and state health department staff.

Evaluation of the summer migrant program occurs in several ways. The principal values most highly the informal interviews he has with participating students and their families; the consensus from those interviews is that the program is effective. Program staff also believe the program provides key learning experiences children enjoy. Last year the school also administered the Wide Range Achievement Test-Revised (WRAT-R) to all the summer program students who completed the entire summer session (about half of the overall number who attended). The group showed gains in math for all grade levels and gains in English for all grades except third grade. This year (1991) the school is using the district CRT (for grades one through six), given in the spring, as a pre-test for students who attend school within the district, and all full-summer program participants will be administered the CRT again at the end of the summer as a post-test. The WRAT continues to be used for secondary students.

PARENT INVOLVEMENT

Parent involvement occurs primarily at the outset of the program, when outreach coordinators contact parents about sending their children to the summer program. The bilingual recruiters do extensive community outreach, and travel throughout the area to meet parents (to the orchards where they work as well as to local churches, centers, and other gathering places). Once the program is underway, the outreach coordinators ride the buses every day and visit homes and fields to check up on secondary school students' progress.

The program also has a Parent Advisory Committee to help advise the school on the design and implementation of the school program, and the school holds a general introductory meeting for all parents at the beginning of the summer. The principal, who is bilingual, also talks informally with parents throughout the duration of the program.

INITIAL REQUIREMENTS

The idea for the program came from the school principal, who recognized a need within the community—especially after a similar program in a neighboring town was closed. It was his efforts to start the program, hire staff, and oversee its operation that has made the program operational. Staff salaries represent the largest element of the program's cost. Staff for the program include seven teachers, six classroom aides, a portion of the principal, and some part-time support staff. There is also the cost of the outreach workers who recruit families into the program.

The sponsoring school need not purchase any new curricular materials, any special equipment, or provide any staff development. There are, however, other additional costs including: building operation and maintenance for the extended time period; supplies and materials for the students; daily transportation of the students; daily meal service; and the cost of the afternoon field trips. Health screening is also provided by the County health department.

THE SITE

The *Extended Time–B* summer migrant program is offered in a K–6 elementary school in a large school district in a western state. During the regular school year, the enrollment is about 900; during the summer program, it is 300 total, but on any given day approximately half that number attend. The community is situated in a major migrant stream, and families may spend only a few weeks or up to a few months in the area on their travels. The participating children are primarily Mexican-American with a few Native American children as well. Some children speak no English, while others speak or understand only a limited amount; others are more fluent. Half of the teaching staff are bilingual; those teachers who do not speak Spanish are teamed with bilingual aides. Students' English proficiency and previous educational experiences vary widely. It is not yet clear whether and how the differential experiences of participating children are dealt with instructionally.

Chapter Three

Classroom Instruction

by
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A fact of "schooling effectiveness" which is typically under-discussed is that student achievement is a function of student experiences. It doesn't matter whether the child attends a school which claims to follow Ron Edmonds' precepts, or claims to use the "10 characteristics of effective Chapter 1 programs," or claims to be a "Success for All" or "Reading Recovery" or "Comer" school. What matters is the amount and type of material the child works on. In Special Strategies we hypothesize that students will learn more when they interact (at home, and in regular and/or special classrooms) with materials which are at the appropriate instructional level, over enough time, with enough inherent or external incentives, and presented through high quality instruction. Slavin (1987) calls this QAIT.

QAIT is an issue of curriculum and instruction. In Chapters One and Five, we refer to school level variables as being macro-instructional. They matter to the extent that they facilitate teachers and parents providing quality, appropriate, high incentive materials to students over adequate time for the students to learn.

The focus in Chapters Three and Four is on what teachers and students do, and on how that is influenced by the various Special Strategies. In this chapter we begin the process of looking inside regular and "special" classrooms in the Special Strategies schools. Chapter Three examines instruction as presented by teachers and schools using the particular special strategies. The basic data for this section are derived from the nearly 150 hours of Special Strategies Observation System (SSOS) observations made by field staff in the various programs during their spring 1990 visits. These focus on the *Q*uality, *A*ppropriateness, *I*ncentives, and *T*ime (QAIT) of the programs and the larger schools. SSOS data are augmented by qualitative data regarding the overall quality and integration of the curricular programs.

First year Special Strategies classroom level observations and analyses indicate the following, which might be considered as hypotheses for second and third year testing:

- Philosophy-based, schoolwide, and adjunct programs make very different assumptions regarding the role of regular classroom instruction.

- Some of the philosophy-based programs appeared to be having direct impact on the levels of interactive instruction (a positive predictor of student achievement gain) being received by students.

- However, at most of the philosophy-based program sites, students appeared to spend significant percentages of their time socializing or uninvolved in academics (negative predictors).

- The schoolwide projects, by contrast, appeared to be having considerable success in reducing socializing and uninvolved time. During year one, schoolwides were having moderate success at increasing levels of interactive instruction.

- At some philosophy-based and schoolwide project sites, reduced class size, reduced pullout or tracking programs, and increased coordination among teachers, administrators and parents were mentioned by staff as classroom-level benefits of the projects.

- The strengths of adjunct programs during pullout times are often clear. However, the frequent lack of coordination with regular classroom instruction raised issues which often went unaddressed. While there were exceptions, the focus on an adjunct program combined with a lack of curricular and instructional coordination often appeared to result in lackluster instruction during the majority of many students' academic days. The exceptions involved concerted efforts on the part of local educators to coordinate the regular and adjunct programs.

- There was considerable variance among regular class instruction patterns in all programs. No program has yet left a clear, uniform imprint on regular classroom instruction across these often highly recommended implementations.

At the level of instruction, we have divided first year analyses among the three basic types of special strategies: philosophy-based, schoolwide, and adjunct.

First are the "philosophy-based" interventions. These include Paideia, Coalition of Essential Schools, and Comer schools.

Like the philosophy-based strategies, schoolwide programs attempt to change the whole school, and often eliminate pullout and even in-class supplementary help. These efforts attempt to change the quality of instruction received by students throughout the school day. The most frequent methods for achieving these goals are reduced class size and staff development. Often, they attempt to change the overall school climate or the relationships between school and home in efforts to improve students' attitudes toward schooling. Unlike the philosophy-based strategies, many schoolwide projects are completely locally developed.

Schoolwide projects involve a variety of techniques, ranging from the complete elimination of pullout programs to a variety of alternative uses of Chapter 1 funds. Success for All is an example of a schoolwide intervention which includes one-to-one tutoring for first graders. We are finding that many schoolwide projects, be they generic or more refined, involve a pullout component for some students.

Some strategies are designed to influence a small portion of the students' days without necessarily changing other portions. These adjunct programs assume a "booster shot" model. If METRA, Reading

Recovery, CCC, and extended day/year work to increase students' overall academic achievement, it must be because they provide students with sufficient skills so they can succeed in their pre-existing, regular classes, which are presumed to be of reasonable quality.

In the next section of Chapter Three, three examples will be provided of instruction as offered under these three arrangements.

The intended and actual classroom-level workings of these three types of special strategies are often quite different. In the next section, classroom-level descriptions are provided from examples of philosophical, schoolwide and adjunct special strategies. Those detailed presentations are followed by low-inference classroom observational data from the wider sample of special strategies sites.

An example of instruction in a philosophy-based special strategy: Coalition of Essential Schools

If a "philosophy based" intervention is to improve students' achievement, then the changes envisioned by the program designer must reach inside the classroom. In the ninth grade team at Sizer–D school, which operated in a nearly "school within a school" fashion, this was clearly happening. Partially because the superintendent and school board of this small district had made a formal commitment to the nine CES principles, the school was unusually free to explore the academic potential of the CES model.

Four teachers, one certified in English, one in math, one social studies, and one science volunteered for the program. This team was given an extra group-planning period each day, and with a total of 80 students for whom they were responsible. Teachers met daily, reviewed upcoming units, explored opportunities for cross-curricular collaboration, and discussed students who appeared to be having particular difficulties. The net effect for the group of students being served by CES at Sizer–D was a high level of QAIT across students' academic days.

Quality of Instruction was enhanced by increased staff development, increased collaboration, and by focusing on "essential questions." In one English class, for example, students spent three days reading a short story concerning a conflict among the crews of nineteenth century canal barges and discussing the historical as well as literary quality of the story. The historical perspective was added because the teacher was coordinating his nineteenth century American literature units with nineteenth century history units being taught in social studies. The effect of this unusual coordination was that the students understood the story not simply as a conflict among abstract people, but among people facing real world problems at a time different from their own. The effect was further enhanced when the English and social studies teachers took their students to visit the remains of a nearby 19th century canal.

The small group discussions were succeeding in part because the teacher had been attending cooperative instruction classes. The cooperative learning course was being offered in coordination with the Coalition of Essential Schools project, and probably would not have been offered without it.

Appropriateness of Instruction was enhanced by the smaller class sizes. The common planning time was also beneficial. If a student was having trouble in one class, the four teachers compared notes and perceptions of the student's strengths and weaknesses. The goal of those sessions was to evolve a plan which not only addressed the instructional needs of the student during the one troublesome class per day, but coordinated both curriculum and support for the child across the whole day.

Incentives for learning were increased at Sizer–D. The effect of smaller classes was that students and teachers had increased potential to get to know each other. One effect of teaming instruction for a fixed cohort of students was that teachers shared information regarding students' days, and were able to coordinate their efforts to motivate students. For example, when a ninth grade boy fell three homework assignments behind in algebra class, the entire team restricted the student's options until such time as he completed the work. The result was that the boy caught up in two days.

Increased use of cooperative learning strategies appeared to increase students' interest in courses and materials. Students often seemed at least as motivated by the challenge of impressing their peers with their knowledge as with getting a grade from their teachers.

Finally, the construction of cross-course, team-based projects appeared to be highly motivating for students. The opportunity to work on larger, more integrated projects seemed to attract the interest of some students who otherwise might have "tuned out."

Time for in-school learning of "essential" material was increased for the 80 CES students. The most important additions came through the above mentioned coordination among courses, and through the creation of "flex time." Flex time was a class hour during which CES students were allowed to collaborate with their teachers and colleagues on academic tasks. The hour was arranged by the elimination of study hall for the students. In flex time, students were assigned to particular teachers (as in study hall). One difference in flex time was that both teachers and students were aware of the day's and week's assignments, and any assignments which were overdue. A second was that students regularly had cross-course projects which were being worked on by teams. The teams' accountability on products had the effect of creating peer encouragement for individual effort during flex time.

An interview with the CES English teacher at Sizer–D and extended observations of his CES classes indicated that he was able to make considerable curricular and instructional changes as a result of the CES. These included an increased focus on character analysis in stories, greatly increased cooperative learning opportunities, many more opportunities to explore open-ended, more "higher order" questions, and greatly increased quality in student projects. The teacher was particularly impressed with students' cross-course projects.

Sizer–D is an example of a relatively successful introduction of a philosophy-based intervention. While most of the philosophy-based sites were able to demonstrate some classroom-level effects of the strategies, several were not as clear as Sizer–D.

For example, at Sizer–E the CES program was being implemented in a similar-sized small-town high school. However, the community and school district were experiencing considerable fiscal distress, and the superintendent who brought CES to the district had moved to a more economically stable district. A lack of money to reduce class sizes and a lack of common planning and "flex" times had resulted in an implementation which was sporadic and uneven. In some students' days it was not always clear that any components of "essential" schooling, as defined by Sizer (1982) and described in Chapter Two, were being provided. Although the school's stationery associated the school with the Coalition, evidence of the program was scarce in most teachers' daily functioning.

By not specifying exact characteristics of full implementation, the philosophy-based programs in the Special Strategies studies invited both creative development and uneven implementation. At the classroom level, the sites being investigated demonstrated both.

An example of a schoolwide project

The principal and staff of the Schoolwide–C project had set as one of their restructuring goals to eliminate all pullout programs. The only exceptions were to be for moderate to severe special education needs. To accomplish the goal, the principal and district negotiated not just with the state Chapter 1 director, but with the state special education department, and two other categorical programs. The program was not begun until all negotiations had been successfully completed.

In the primary grades, the results were dramatic. No teacher's class had more than 16 students. All first grade teachers had the assistance of a half-time bilingual paraprofessional. Second and third grade teachers had approximately one quarter use of a paraprofessional. The average primary class had less than one student pulled out for any reason per day.

One clear effect of this shift was an increase in teachers' ownership of students' learning. All of the teachers reported a greater awareness of the students' needs and progress. All but one of the primary teachers reported a much greater sense of power to affect achievement gains. (The remaining teacher, who had been on probation the previous year for what the principal perceived to be deficiencies in her teaching, placed primary responsibility for students' learning on parents. She felt parents were letting the students down and "don't care about education.")

A second shift was a great increase in staff development. Chapter 1 and other categorical funds were used to provide training in cooperative learning teaching techniques, whole language instruction, and assertive discipline. Additional topics were covered at the request of teachers.

In the Special Strategies model of Chapter 1 effects, Schoolwide–C was obtaining its effects through an overall increase in QAIT and the elimination of student time loss resulting from moving among programs. Observer notes on QAIT at third grade include the following:

Quality of instruction in third grade varied widely. The grade team leader impressed the observers as being a master teacher. She provided a thoughtful, directed educational environment for her students. Her classroom had a wide variety of materials for students of differing skill levels. Students were actively involved in learning. The one first year teacher had unusually good management skills for a first year teacher and provided a multitude of varied, often curricular-integrated, hands-on activities for her students. The most senior teacher used brief introductions to new materials, followed by extended seatwork. This often resulted in low on-task rates among students. Like many of the students in this class, observers often had difficulty understanding what work was expected of the group, and what connections one hour's tasks had to another hour's task. The fourth teacher provided high quality instruction while she was instructing, but relied heavily on punitive systems of student control to the detriment of her overall effectiveness.

The enhanced staff development had provided new options to teachers, and the reduced class size served to decrease many of the burdens on the teachers. The effect was to increase teachers' instructional options. Three of the four teachers were exercising these options to enhance their instruction. One appeared to be taking the opportunity to decrease her work load.

Appropriateness—Clearly, reducing class size to 16:1, eliminating pullout programs, and increasing staff development all had the effect of increasing teachers' opportunities for providing more appropriate instruction to more students. Again, in three of four third grade classes, there was strong evidence of this effect. Even in the least impressive case, there was evidence of occasionally individualized instruction.

A part of this particular schoolwide project had been a shared decision to give each teacher $100.00 in individually controlled materials selections. While not a large sum, this allocation to individual teachers was perceived by the staff as being supportive of their professional judgment. The $100.00 was valued by most teachers for its symbolic as much as its practical worth. Teachers used the money to provide materials which were more often appropriate to the diverse needs of their students. The combination of smaller class sizes and a (albeit modest) sum usable for addressing individual needs often leads to unusually high levels of individually appropriate, personalized instruction for students.

Incentive—The schoolwide incentive program of giving special trips to students who had perfect attendance or made the honor roll each nine weeks is credited with decreasing absences by over two-thirds and increasing students' academic performance. In addition, individual teachers reported they were getting to know students better than before, and were better able to motivate students. Because many more parents became more actively involved in their children's schooling, children were more likely to receive consistent messages regarding academic expectations.

Time—With the schoolwide project, students spent much less time moving from program to categorical program.

The principal and more than one teacher had referred to the old system of multiple pullouts as making the entire school into a "bus stop." The new system at least offered the potential for intelligent use of uninterrupted scheduled time. Some of the more senior teachers report that with fewer students constantly in the halls going to or from special programs, less time was wasted in managing students' behavior.

The school used some of its Chapter 1 money in conjunction with various local and categorical funds to offer a summer school. Thus, Chapter 1 became a part of an increase in the total time available for instruction.

In addition to the within-third grade QAIT, Schoolwide–C's overall reorganization and heightened cross-grade coordination meant that teachers could have more nearly uniform expectations as to students' third grade entry skills. This narrowed the range of "appropriateness" for which teachers had to prepare and allowed them to proceed at a more rapid pace.

Most of the characteristics noted above appeared in most of the various schoolwide projects' classrooms. Of the eight schoolwides in Special Strategies, five have added summer schools. Nearly all have reduced class sizes and pullout programs. Most have spent some of their funds on new materials which allow greater instructional diversity within the classroom, and all have increased staff development opportunities and support.

An example of an adjunct program: Reading Recovery

An explicit assumption of Reading Recovery is that intensive, high quality intervention during the first academic year of schooling is the most productive investment of educational resources. In the terms of the effects model, Reading Recovery assumes that by providing thorough ongoing diagnoses of a students' reading problems, and high quality one-to-one tutoring in an incentive-rich environment (e.g., high QAI) for a limited amount of *T*ime, educators can prepare students to productively absorb regular classroom QAIT for years to come. An unstated assumption of this model is that regular classroom QAIT is of sufficient quality that a typical child can make at least average academic gains in that environment.

The format of Reading Recovery is straightforward. First grade children who are having difficulty learning to read work one-on-one with a Reading Recovery teacher for 30 minutes a day until they can function at the level of their regular class. This may be as short as a few weeks, or may last a school year, although in many schools there is some pressure to graduate students in 12-18 weeks.

During their first two weeks in Reading Recovery, student and teacher "roam in the known." This means that they read together on materials that the student enjoys and in which he or she feels comfortable. The goal is to build confidence (*I*ncentive) and to establish a student's current skill level (*A*ppropriate level for instruction).

For the remainder of a student's involvement in Reading Recovery, she or he and the teacher spend 30 minutes a day reading "little" books and composing and writing stories. Each day the child is introduced to a new book. (Of the 700 "little" books on the Reading Recovery book list, each is graded into one of 20 levels of difficulty. Thus, Reading Recovery pays unusual attention to the dimension of *Appropriateness*.) Each day students read from at least three books, and each day they write. As the child reads, the teacher maintains a running record of errors, and a miscue analysis is taken on the third book of the day.

Observers at RR-A school repeatedly expressed the opinion that within the half-hour sessions, Reading Recovery "works." Students appeared to be making clear gains, and testimonials from former Reading Recovery students, from parents, and from the principal were readily available. A second observation in both schools concerned the lack of generalization from the Reading Recovery room to the regular classroom. The lead researcher stated,

> One of the interesting things about RR in this school is that there is so little carryover into the regular classroom of the techniques and strategies. I did see the RR children utilize strategies from RR in the regular classroom, such as getting their mouths ready for the word, and covering over and revealing the word with their fingers. However, there were not many instances in which the teachers utilized the strategies. They seemed to be at a loss to figure out how to adapt the strategies used in RR to the whole class. Instead, they reverted back to typical and pretty traditional instruction.

This note was from a school in which the regular first grade teachers were also the pullout Reading Recovery teachers. That is, the regular first grade teachers spent two hours each day providing one-to-one Reading Recovery instruction. The observer went on to note that,

> The RR program is not integrated into the regular program by design. The instruction is separate and not integrated. Students may miss a variety of instructional lessons, including reading, math and science. They usually do not miss specials, i.e. art or music or recess. There is no systematic way that students learn about what they missed; rather they just try to figure it out as best they can.

A final point made about the program was that the cost per child was a direct function of the number of children served. In theory, students were served for 12 weeks and were then fully ready to succeed in their regular classes. In practice, some students were served for the entire first grade year. This tripled per child costs and, in a related matter, meant that some children who were on the Reading Recovery waiting list received no service. As an observer noted, "One great difficulty in [this school] is that there are far more children who need service than can be served."

It is possible that so many students needed a program like Reading Recovery because the regular classroom instruction was lackluster, or because there was so little cohesion between students' Reading Recovery instruction and regular classroom instruction.

Summarizing the Reading Recovery instruction, it provided very high levels of quality instruction at almost invariably appropriate instructional levels. The Reading Recovery process seemed to provide ample incentives for students to want to read, and in several instances appeared to "turn around" a child who prior to Reading Recovery was losing confidence in his or her abilities and also losing any incentive to try hard in school. In the Special Strategies model, Reading Recovery is unusually high in quality, appropriateness, and incentives—"QAI."

The instructional trade-off involved in Reading Recovery concerns the limited Time of the intervention. Reading Recovery is designed to achieve full effects in half hour sessions, given daily over one third of a school year. The assumption that the intervention is sufficiently powerful to "work" in a total of 30-50 hours is a bold one, and one not always met at the Special Strategies sites. The further assumption that the quality, appropriateness, and level of incentives provided over the other 5.5 hours of school each day during the Reading Recovery intervention, and the full 6 hours of all other school days is either irrelevant or of sufficient quality to complement the Reading Recovery program seemed unwarranted at the two Special Strategies sites.

The lack of coordination between Reading Recovery and regular instruction was a concern of observers at both sites. The effect is related to QAIT. If the students whole days' QAIT was to be high, it seemed sensible to the observers that the Reading Recovery teachers, who knew a great deal about their charges' skills, would coordinate tasks with the regular classroom teachers. This rarely happened. It was particularly striking to visit a school in which first grade teachers served as half-time Reading Recovery/half time regular classroom teachers and still did not transfer their instructional skills between Reading Recovery sessions and their same students' regular reading instruction.

Other adjunct programs, such as computer assisted instruction, peer tutoring, and METRA tutoring, make similar, if somewhat less dramatic, assumptions. Each assumes that a concentrated injection of one program can provide a "booster shot" which can carry a child forward. In the Special Strategies sites in which the various adjunct programs were reasonably well coordinated with regular instruction, the strategies often appeared to be successful. As in the case with Reading Recovery, observers of other adjunct programs often reported a mixture of admiration for the program in isolation and a concern for the lack of connectedness between curricula and instruction in the regular and adjunct programs.

Extended day and extended year programs represent a special case within the adjunct category. The simplest way to portray them within the Special Strategies instructional model would be to say that they add Time. However, in the rural extended day ("Chapter 1 Club"), extended year (summer migrant), and in several of the schoolwide summer school programs, the principals and staff were quick to note their programs were not intended to be "more of the same." Rather, the instructors used the time to add higher interest (high Incentive x Time) activities. The after school "Chapter 1 Club," for example, divided its time between reading high-interest stories, writing, and making crafts built around the stories.

Similarly, the summer migrant program spent part of each day on "the basics," but devoted time every day to art, computers, swimming, field trips, or other higher interest activities. The classes at the summer migrant program, like the classes at Schoolwide–C's summer program, visited their state zoo, museums, and artistic performances. These adjuncts attempted to achieve their effects through the intersection of added time and high incentive.

Cross-program comparisons

The case was made at the beginning of this chapter that academic achievement would be a function not of "program name" but of quality of curricula and instruction offered to students. Toward determining quality of classroom instruction, the Special Strategies research team has developed a classroom observation system. This system is used in both the student's regular and "special" instructional settings.

The observation system developed for this purpose is called the Special Strategies Observation System (SSOS). The SSOS (see Appendix B) was developed to serve three purposes. It provides low inference data which can be compared to previous research on teaching. (For a review of this research base, see Brophy & Good, 1986; Rosenshine & Stevens, 1986.) Second, it is structured to provide moderate-inference data relative to the quality, appropriateness, incentive structure, and instructional use of time during a class. Third, the SSOS provides space for the direct recording of qualitative observations during an instructional period. By garnering all three levels of data on a single document, the SSOS allows field researchers the opportunity to cross check their perceptions of the class and the hypothesized instructional model as classes unfold, and after the field visit as the research teams refine their case reports.

The low inference measure of student and teacher engagement derived from an instrument developed by Evertson and Burry (1989) gathers student engagement data. In that section of the SSOS, once every eight minutes raters note the activities of students (# on task, # off task, # waiting) and their interactions with teachers and peers (# of students engaged in interactive instruction with a teacher, the number of students who are receiving directions from an aide, the number of students working alone, and so forth.) Stallings (1980) found interactive instruction to be a strong predictor of students' achievement growth. That general finding has been frequently replicated (for reviews, see Rosenshine & Stevens, 1986; Waxman & Walberg, 1991). Because SSOS underwent considerable modification between the fall and spring observations, and the earlier and later versions of the system use different metrics, spring-only data will be discussed below.

A test of inter-rater agreement among Special Strategies observers on the student and teacher engagement portions of the SSOS yielded agreements which were stable in the range from .88 to .99. A separate study of those same variables on the SSOS found levels of classroom stability rates over three observations in the .6 to .85 range (Schaffer & Nesselrodt, in process).

Table 3.1 on page 3-13 presents SSOS data from the spring 1991 observation cycle. Because the number of observations was relatively small at a few sites, data have been aggregated to the program level for the first year report.

Readers should remember that the data are presented to provide a first-year picture as an early look at a three-year effort. They do not represent summative evaluations of specific programs or broad program types.

The data in Table 3.1 present four variables taken from two sections of the SSOS. The first variable presented, "Average Percent of Students Engaged," is taken from the "Student Engagement" section of the SSOS. This data is gathered every eight minutes during a lesson, beginning two minutes after the published beginning time for a lesson. This variable is a measure of the distribution of student activities across simple categories (on-task, off-task, and waiting), and does not take into account the nature of the students' academic interactions. Stallings (1980) found that an average student engagement rate above 80 percent was a predictor of high student achievement gain.

Column B of Table 3.1 indicates that no program systematically instilled that engagement rate across the two sites throughout students' reading, language arts, and math classes. Three programs came close: Paideia, the Coalition of Essential Schools and urban schoolwide projects are programs which attempt to affect the entire school's academic program. The philosophy-based approaches and the schoolwide projects are all intended to improve the quality of students' whole days. The fact that, on average, both entire categories averaged above 70 percent student engagement during academic times was encouraging. Philosophy-based and schoolwide interventions should raise the overall quality of instruction during students' whole days. If the adjunct programs had achieved higher overall rates of engagement during regular reading, math, and language arts classes than was achieved in the more schoolwide projects, serious doubts would have been raised about the efficacy of the philosophy-based and schoolwide efforts.

Observations during the regular reading, math, and language arts classes of the two most intensive pullout programs (Reading Recovery and CCC schools) indicated relatively lower overall rates of student engagement. (Problems with the coding of SSOS data in the METRA/Peer Tutoring schools resulted in dropping that data from the first year analyses.) However, should second year METRA, Reading Recovery, and CCC data continue the trend apparent in Table 3.1, that data will suggest a limitation in adjunct programs. By not focusing on the students' whole days, the adjunct programs may be losing some of the advantages they accrue through intensive interventions during limited portions of the students' days.

In this regard it is worth noting some data not presented in Table 3.1. At the Reading Recovery sites, some SSOS data was gathered during the half-hour Reading Recovery one-on-one tutoring sessions. That data invariably reflected a near 100 percent student engagement rate during the Reading Recovery sessions. However, Table 3.1 reinforces the qualitative observations regarding the isolation of the program effects at the two Reading Recovery sites.

Column C indicates that in all of the schools/strategies, there were individual class period observations during which student engagement rates were at or above 80 percent. However, the ranges of engagement were broad at every school.

The remaining columns present data from the "Groups and Activities" section of the SSOS. This section allows observers to differentiate between student time spent in interactive academics, working alone, time spent in performing classroom management tasks including receiving directions, and time spent in socializing or uninvolved. It further allows observers to differentiate among persons with whom students are interacting. In the "Groups and Activities" section, a student can be involved in interactive instruction with their teacher, an aide, or peers (e.g., cooperative learning or group work). Similarly, a student can receive directions or become involved in a social discussion with persons from any of the above groups.

The "Groups and Activities" section of the SSOS is completed once every eight minutes, immediately after an observer completes the "Student Engagement" section of the SSOS. It is, therefore, possible for the two sections to yield differing pictures of students' time use, even during the same instructional periods. Comparisons can be made across the two sub-systems, but they should be made cautiously.

Column D presents mean rates of interactive instruction with students during reading, math, and language arts classes in the various Special Strategies schools. Interactive instruction is a measure of percentages of students interacting with their teachers, with aides, or with peers and doing so on subjects related to the lesson. Listening to a presentation, working on spelling words with an aide, and working on a cooperative learning task with peers would all be examples of students' time being spent in interactive instruction. Interactive instruction is logically a subset of engagement (if a student is interacting with her teacher on an academic subject, she necessarily is coded as "engaged" on the "student engagement" measure).

Interactive instruction involvement rates above 50 percent have been associated with highly effective regular classroom instruction (Stallings, 1980). The Coalition of Essential Schools sites, Paideia, and Success for All obtained average student rates on interactive instruction which were above 60 percent. The urban extended year schoolwide sites and the rural extended day and year sites also achieved interactive instruction rates which were above 50 percent. Regular classroom instruction in the other programs did not achieve these levels. The general trend was that philosophy-based programs were relatively high in mean percentages of students involved in interactive instruction with their teachers. Schoolwide projects were somewhat lower but still at the 50 percent level.

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As had been the case with total engaged time, students' interactive instruction rates were lower during regular reading, math, and language arts classes in schools which used their Chapter 1 funds to provide adjunct programs.

Column F of Table 3.1 presents rates of student socialization and students being uninvolved during the every-eight-minutes observations of reading, language arts, and math classes. Research indicates that a modest amount of student socializing is not a negative predictor of achievement gain; however levels above 5–10 percent may indicate that students are spending significant percentages of their academic time on activities which were clearly unrelated to schooling. During regular academic periods in two of the schools with adjunct programs, socializing and uninvolvement consumed over 17 percent of students' time. No schoolwide project had levels that high. This suggests that the schoolwide projects, whatever their other accomplishments, were succeeding at reducing student socialization during the academic periods of reading, math, and language arts.

Among the philosophy-based programs, the Paideia schools appeared to be having considerable success at keeping students' focus off non-academic socialization. By contrast, the Comer sites, which had relatively high rates of student involvement with teachers, also had high rates of students socializing or being uninvolved in academic tasks. It appears that while teachers at those sites were skilled at engaging students for academic purposes, they were less successful at managing students with whom they were not directly involved.

Column H is provided for purposes of completeness. It includes all of the "other" time from the "Groups and Activities" section of the SSOS. This includes time in transitions, and time spent working alone. For the purposes of a first year report, it is simply presented to make clear that D and F can be added to an "other" category (H) to get 100 percent of the students in classrooms during reading, math, and language arts classes. Further analyses of several of these variables will be undertaken with the larger data sets from years two and three.

As was noted earlier, interactive instruction can include student interactions with teachers, aides, or with peers. Table 3.2 "unpacks" that data by presenting the three groups separately. In so doing, it provides further understanding of the workings of the various programs in the students' academic days. The most noteworthy feature among the philosophy based programs was the high rates of teacher-student interaction. By and large, these nine schools achieved their high rates of interactive instruction "the old fashioned way." Paideia was the exception here. The "Socratic seminars" and other methods of designed to increase students' intellectual involvement produced the second highest rate of student-to-student academic interaction among the program types. Given that a primary metaphor in the Coalition of Essential Schools is "student as worker," the six percent student-to-student interaction rate was somewhat

Table 3.1

Student Engagement Rates

During Reading, Language Arts, and Mathematics Classes by Program and Category

A	B	C	D	E	F	G	H
Strategy Type	Percent of students engaged in academics		Percent of students Engaged ininteractive instruction with teachers		Percent of students socially engaged or uninvolved		Percent engaged in other* activities
	Average	Range of observation**	Average	Range of observation	Average	Range of observation	
	Philosophy-based Programs						
Re:Learning/CES	77%	40–100%	63%	15–94%	14%	0–42%	23%
Paideia	77%	40–100%	64%	32–100%	2%	0–23%	34%
Comer SDP	68%	40–90%	38%	12–90%	16%	0–56%	46%
Average* **	**74%**		**55%**		**11%**		**34%**
	Schoolwide Programs						
Schoolwide–Urban	79%	40–90%	48%	15–90%	4%	0–18%	48%
Ext Yr Schlwide–Urban	62%	40–85%	52%	18–74%	12%	4-22%	36%
Schoolwide–Rural	71%	0–90%	39%	9–74%	4%	0–40%	54%
Success for All	74%	30–100%	63%	20–75%	12%	0–55%	25%
Average	**71%**		**50%**		**8%**		**42%**
	Adjunct Programs******						
Reading Recovery	62%	0–100%	35%	15–80%	9%	0–17%	56%
CCC	62%	40–80%	45%	22–80%	19%	0–68%	36%
Extended Day/Year	74%	60–100%	51%	34–75%	18%	0–50	31%
Average	**66%**		**43%**		**17%**		**41%**
Studywide Average	**71%**		**50%**		**11%**		**39%**

* "Other" includes working alone, and time spent in such classroom management tasks as receiving directions.

** Range provides the lowest and highest percentages of reading, language arts, or math class periods observed in this program type.

*** Weighted by program.

**** Note that this is regular class instruction time, not adjunct program time.

Table 3.2

Mean Rates of Interactive Regular Classroom Instruction With Teachers, Aides, and Peers

During Reading, Language Arts, and Mathematics Classes by Program and Category

Strategy Type	Interactive Academic Engagement With Teachers	Aides	Peers	Total
	Philosophy-based Programs			
Re:Learning/CES	56%	1%	6%	63%
Paideia	46%	2%	16%	64%
Comer SDP	37%	1%	0%	38%
Average	**46%**	**1%**	**7%**	**55%**
	Schoolwide Programs			
Schoolwide–Urban	38%	10%	0%	48%
Ext Yr Schlwide–Urban	29%	22%	1%	52%
Schoolwide–Rural	32%	4%	3%	39%
Success for All	36%	0%	27%	63%
Average	**31%**	**12%**	**8%**	**50%**
	Adjunct Programs*			
Reading Recovery	30%	0%	5%	35%
CCC	38%	0%	7%	45%
Extended Day/Year	37%	10%	4%	51%
Average	**35%**	**3%**	**5%**	**43%**
Studywide Average	**37%**	**6%**	**7%**	**50%**

* Note: This is regular classroom instruction time, not "Special Strategy."

disappointing. Perhaps this is a reflection of the fact that several of the sites were in their first year of full implementation during the 1990-1991 school year. Second year data should be instructive in that regard.

By contrast, schoolwide projects, which often include extensive use of classroom para-professionals, obtained an average of 12 percent of their academic interactions via those aides. Among schoolwides, Success for All is noted for its emphasis on students reading to and working with other students. Nearly half of the Success for All interactive instruction rate was obtained through student-to-student academic engagement.

The 43 percent average interactive instruction rate in adjunct programs was achieved largely through direct interactions with classroom teachers. Classroom aides were less likely to be found in classrooms with supplemental programs in schoolwide projects, and the regular classroom teachers were not making extensive use of cooperative or other types of student-to-student learning.

Summary

The Year 1 Special Strategies classroom data indicate several tentative trends. First, the philosophy-based programs were relatively successful at obtaining moderate-to-high levels of student involvement directly with teachers, and with academics generally.

The various types of schoolwide projects had similarly high average rates of interactive instruction; however, unlike adjunct programs, schoolwide programs did obtain low percentages of student socializing and uninvolvement. Given that several of the principals had described their schools as having been in near anarchy or as "bus stops" before the shift to schoolwide status, and that several of the projects had specifically built higher "time-on-task" into their schoolwide projects, this decrease in off-task behavior may represent a considerable victory.

The reading, math, and language arts observations in adjunct programs presented a mixed picture. Percentage of students involved in interactive instruction with their teachers was found to be moderate during most observations. However, in two of the program types, students' rates of socializing and uninvolvement during academic times were high. The result was moderate-to-low overall average percentages of students engaged in academic activities during non-adjunct hours. If students are to succeed in school, their whole days must succeed. The first year data at several of the adjunct programs raised concerns regarding the benefits to the students' overall days. This occasional lack of coordination may or may not be compensated for by a set of intense, high quality, highly appropriate, high incentive activities during the specific adjunct program's activities.

Questions requiring further study

The first year observational data from regular reading, language arts, and mathematics classes is suggestive and not summative. Its greatest value is in raising questions for further analysis. Among the questions raised after one year are the following:

Regarding the *philosophy-based programs*, SSOS and qualitative classroom level data suggest that in many sites the "philosophy" has indeed entered the classrooms. Will this level of involvement continue across several grades? Are the sites aware of the often-high levels of student socializing and uninvolvement? If yes, are the schools or programs undertaking to address this potential problem, or do the sites view such time as an acceptable by-product of their models? Perhaps the Sizer goal of "student as worker" is facilitated by some social interaction, for example.

At the *schoolwide project* sites, have there been specific efforts to reduce off-task student activities, or have these moderate-to-low rates been natural by-products of the programs? Success for All is a schoolwide project which places particular emphasis on first grade achievement and on first grade interventions. Will that programs high rates of engagement hold up during second and third grades where fewer resources are focused?

At the *adjunct program* sites, what are the barriers and incentives for higher engagement and coordination? In sites which identify coordination as a goal, to what extent is that succeeding? Where there are instances of coordination resulting in changes in regular classroom practices, and can those be readily replicated?

At virtually all sites, cross-classroom, within-school ranges on student engagement and student socializing were considerable during Special Strategies spring 1991 observations. Are principals aware of these variations? Do they view large variations as a problem? Do they have plans in place for addressing those within-school variances?

A question which will span years two and three will be addressed as longitudinal achievement and other outcome data become available. Are the regular classroom, school, special program implementation level, or special program choices more important in obtaining higher student attendance, achievement, and other desired outcomes?

Chapter Four

Classroom Instruction as Received in Students' Whole School Day

by

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This chapter focuses on an analysis of special strategies from the perspective of a sample of students who are the subject of classroom observations in special strategy sites. Section I presents the methods used for collecting the data and contains a description of some typical students who are included in the whole school day (WSD) analyses. Within this section, we also discuss some examples of the cultural variation that characterizes some schools in the sample and the way this variation affects key elements of schooling. Section II of the chapter presents findings as follows from the first-year WSD analyses:

- intended versus actual instruction time;
- intended versus delivered curriculum; and
- a series of WSD exemplars that illustrate the delivery of special strategy instruction.

Finally, Section III examines some of the questions that need to be addressed in future WSD observations. Preliminary findings of the analyses presented in this chapter are summarized in the box on page two.

Section I: Methodology and research questions

The purpose of the WSD analyses is to observe the instruction received by Chapter 1 students in special strategy sites. WSD students are being observed and followed over the three years of the study. The objective of the WSD component is to describe how Chapter 1 students are experiencing the four instructional elements of the QAIT model: *Q*uality of instruction, *A*ppropriateness of the instruction, *I*ncentive to learn, and *T*ime.

1) *Q*uality: To observe first hand the coordination or lack of coordination between regular classroom instruction and the instruction occurring within the special strategy.

Table 4.1

Preliminary Findings

From Analyses of Curriculum and Instruction in Whole Day Observations

- In the urban Special Strategies schools, 81 percent of the Whole School Day (WSD) students are African-American. In rural sites, 44 percent are Caucasian, 25 percent Hispanic and 22 percent African-American.
- In urban Special Strategies sites, half of the WSD students score in the bottom of the achievement distribution on the CTBS in reading and math (between the 1st and 18th National Percentile). In rural settings, the majority of students score between the 19th and 35th National Percentile in reading and the 36th National Percentile or better in math.
- Special Strategies schools serving single-ethnic populations with a majority of non-English speakers differ in the extent that staff members accommodate cultural and linguistic diversity.
- In elementary first and third grade Special Strategies sites, students spent about 80 percent of their in-school time in instructional settings; the proportion of time in instruction ranges from 38 percent to 96 percent.
- For the students in the WSD sample, reading/language arts uses more time than any other subject area. Students spend on the average of about two hours in these areas.
- WSD students received varying degrees or components of the various special strategy depending upon implementation at the site, teacher expertise, and magnitude and intensity of the intervention.
- Philosophy-based strategies seek to address more than just the teaching of lower-level cognitive skills, and all include a socialization component. For example, as observed in one site, the Comer school development program emphasizes the student's social development. Coalition of Essential Schools and Paideia Programs stressed positive interaction among faculty and students.
- Schoolwide strategies are designed to change the management, organization, and delivery of instruction within Chapter 1. An emphasis on local adaptation and site-based management results in considerable variation across schoolwide sites. As observed in some sites the reduced class size, combined with additional in-class instructional assistance from paraprofessionals, specialist teachers or others, provided additional opportunity for one-to-one and small group interaction in reading and mathematics. Several of the schoolwide sites emphasize a "whole language" approach.
- Adjunct strategies are instructional components added to the regular curriculum. The focus is on remediation for specific sub-populations of students within a school. As observed, these strategies vary in their intensity and magnitude of effect on the students WSD. They also vary in the degree that they are coordinated or integrated with other instruction that students receive during the day.

2) *A*ppropriateness: To collect information on student's perception of difficulty, ease of completion or understanding of a particular task.

3) *I*ncentive: To collect information on student's interest and perceived or actual level of effort on a specific instructional task.

4) *T*ime: To understand the sequence of events and instructional activities received by Chapter 1 students in classrooms and in the special strategy.

The first year data collection focused on time and quality because these are the more objective and most easily observed components of the QAIT model. It is important for the field teams to know and understand the sites and students before focusing on the more subjective and less observable components of appropriateness and incentive.

Procedures

Within each special strategy site, two to three students were selected for shadowing throughout the entire school day. Criteria for selection included teacher judgment and standardized test scores. Teachers were specifically asked to nominate students whom they felt represented the "typical" student who received additional help in math and reading. Because of the high mobility of students in special strategies, a back-up student in each class was also selected. During the three-day site visit, one member of the field team conducted interviews with the principal, teachers and parents, in addition to a conducting a WSD observation. The other member of the team was responsible for the SSOS and WSD observations. A total of 70 students was shadowed during the first year.

The Whole School Day data collection provided a wealth of information on the structure and content of students' days in school. Our first WSD data collection effort followed students from their arrival in their homerooms or first period classrooms through the end of the school day. We attempted to follow students in all their academic subject areas, reading/language arts, math, science, social studies, and computers. Most students were not shadowed during lunch, recess, physical education, music, art, health, or other electives. While we endeavored to follow the specific children for the entire school day, at times we were forced to leave the classrooms in order to collect other relevant information or conduct interviews with key school or district staff.

The analyses described in the section on intended versus actual time use are based upon review of complete Whole School Day narratives of children in schools where we have at least two complete Whole School Days. The analyses addressed two questions: (1) During the day, how much time is available to the student for instruction? (2) Of the time available for instruction, what proportion is spent in instructional tasks and activities? What proportion is spent in non-instructional tasks and activities such as housekeeping or transition?

The analyses of intended versus delivered curriculum are based on all the WSD narratives for each site. A comparative analysis of program descriptions (as described in Chapter 2) and the actual services delivered to students in the WSD analyses were conducted. The major question was: During the day, what evidence is there that students experience components of the special strategy in the classroom?

Description of sample of Whole School Day students

The 70 students followed in the whole school day in Special Strategies represent economically disadvantaged students in both urban and suburban/rural settings. Within the urban special Strategies, 81 percent of the students are African-American, 3 percent Hispanic, 3 percent Asian, and 12 percent Caucasian. Of these students, 44 percent are female, and 56 percent are male. Suburban/rural Special Strategy students include 22 percent African-American, 25 percent Hispanic, 44 percent Caucasian, 6 percent Native American, and 3 percent mixed/other. Slightly more than half (53 percent) of these students are female, while 47 percent are male. The race/ethnicity of the WSD students selected is shown in Table 4.2.

Table 4.2

Race/Ethnicity of WSD Students

Race/Ethnicity	Urban			Suburban/Rural		
	Grade			Grade		
	1	3	9	1	3	9
African-American	39% (15)	26% (10)	11% (4)	6% (2)	15% (5)	3% (1)
Hispanic	3% (1)			6% (2)	12% (3)	
Native American					9% (3)	
Asian	3% (1)					
Caucasian	3% (1)	3% (1)	11% (4)	32% (11)	3% (1)	15% (5)
Total	48% (18)	29% (11)	22% (8)	42% (15)	39% (12)	18% (6)

In urban special strategies, half of the WSD students score in the bottom of the achievement distribution on the CTBS in reading and math (i.e. from the 1st to 18th national percentile). In rural settings, the majority of students score between the 19th and the 35th National Percentile in reading and at the 36th National Percentile or better in math. The distributions of reading and math scores are shown in Table 4.3.

Table 4.3

WSD Students in Special Strategies CTBS Reading and Math Scores

Percentile Grouping	Urban (N=36) Reading	Urban (N=36) Math	Suburban/Rural (N=34) Reading	Suburban/Rural (N=34) Math
1—18	56% (19)	50% (18)	29% (10)	15% (5)
19—35	26% (9)	22% (8)	50% (17)	35% (12)
36 and over	18% (6)	28% (10)	21% (7)	50% (17)
	*(34)	*(36)	**(34)	**(34)

* Percentages based on scores for 34 students in reading and 36 in math, respectively.

** Percentages based on scores for 34 students in reading and math, respectively.

The WSD students represent the range of youngsters who benefit from educational services provided in special strategies in more than just test scores. The following brief descriptions of three urban and three rural students reveal many of the common (and unique) demographic, social, and individual characteristics of these students. Next we provide examples of the cultural and linguistic variation in WSD students.

Urban student portraits

Dwayne: an African-American second grader, urban Extended Year Schoolwide Project

Dwayne is a bright, articulate, ten-year-old African-American male. He is of average build and is usually dressed neatly, although on a few occasions not well groomed. Although he sometimes displays behavior problems, he can also be a shy and demure child with a pleasingly inquisitive demeanor. He generally gets along well with his peers, but sometimes gets annoyed when they want to play and he prefers to work. Dwayne was retained in first grade at another school. His mother transferred him from the school because he was not doing well and she was concerned for his safety. He had to walk past a drug-infested neighborhood. His mother reports that they still have some problems, but he is doing much better at the current school.

Based on his test scores and retention in grade one, Dwayne is considered a low achieving student and in the "bottom class." Initial CTBS scores were: tenth percentile in reading, first percentile in math, and tenth percentile in word analysis. According to his teacher, Dwayne is "a bright and very capable student, in spite of his temper and behavior. He acts up a lot in my class, yet he still does his work. I know he doesn't do the things in other classes that he does in mine. His behavior is better with teachers who are strict. I think he would do better in a class where he could be challenged more. His behavior keeps him from being in the high ability class."

Dwayne lives near the school in a low-rise housing project with his mother, one sister, and three brothers. His mother works as a community assistant at the school. She started volunteering at the school in order "to be involved in what was going on, and let my kids know that I expect them to do well in school." She notes: "I am very strict with all the children about school and homework." She helps the children with homework, during what they call "family time." This is a special time of the evening or afternoon, when everyone gets in the living room to spread out on the floor and work. Because Dwayne's mother works family time is done about three times per week.

Dwayne seems to be close to his mother and wants to please her. When he has problems at school, he talks to her and she tells him to ignore the people who "mess with him." She instructs him to come home after school and don't go to the store where they might continue bothering him.

Dwayne likes art and math most of all. He said his art teacher told him he draws well, and he likes to draw pictures of cars. He wants to "draw cars that people will drive" when he grows up. After school he likes to draw, watch TV, and play with his friends. He notes, "My mother won't let me do anything until I finish homework. And she always helps with that, so I have to do it."

Kathy: a 16-year-old African-American female, urban CES Program

Kathy is an attractive 16-year-old African-American female. She is usually dressed in jeans/pants and multi-color pullover sweater or shirt. Civics/history is her favorite subject in school, partially because of the focus on urban growth. Her favorite task out of school is cosmetology. Her hair is usually fixed in an interesting and creative style. In contrast to Kathy's flair for fashion, she also enjoys participating in the school ROTC program. She sometimes displays a slight temper problem; however, she has been observed making efforts to control it. She was observed arguing with a male student, at which time she used several harsh words.

Kathy seems to listen to and respect the teachers. Observation of her work and behavior in class reveals that she is capable of doing most of her work. Kathy scored in the 40th percentile on the CTBS math test. Although Kathy occasionally has attendance problems, her teachers report that she is a capable student with leadership capabilities. According to one of her teachers, part of Kathy's academic problem is due to her attendance and the influence of her friend Malkeea, who is often disruptive. Kathy's math teacher indicates that she is not a high achieving student, but that she manages to "hang in there." Others of her teachers note that she is a student who tries hard, although she does not participate in discussion.

Kathy lives in a low-income neighborhood with her mother, five brothers and two sisters. She has a twin brother who attends the same school. Kathy's mother works evenings for the post office, so her grandmother oversees the family life. Kathy and her older sister, who is 20, primarily share in the responsibility of taking care of the younger children. Her grandmother has most contact with the school. Kathy's grandmother reports that Kathy and her brother are both very upset when they cannot go to school. There are times they have missed school because there isn't enough money for all the children to have bus fare.

Brenda: an African-American first grader, urban Extended Year Schoolwide Project

(Note: Brenda is atypical of many of the students in this setting. She is not on free or reduced lunch, and is a part of a two parent family).

Brenda is a very small African-American girl, the smallest girl in her class. She is pretty, neatly dressed in print slacks and a blouse. She wears her hair in one braid down her neck. She is very verbal and articulate, appears very curious and clearly enjoys what she is doing. Brenda was tested as a low achieving first grader and is in a classroom that combines first and second graders. Her initial scores on the CTBS were at the 30th percentile in reading and 21st in mathematics. According to her teacher, Brenda has grown a lot. Her confidence is up, and it has helped her in the program. She's made a lot of growth in reading. The teacher indicated that it was not so much because she wasn't capable but because she wouldn't express herself before. The teacher also indicates that Brenda is very expressive and has a clear understanding of how to read. She has also shown growth in math. Brenda's mother requested more math assignments for homework. At the beginning of the year, Brenda was always saying, "I need a helper" (another student to help her with something). Now she is altogether different. On the milepost tests, she got 71 percent of the items right in reading, 88 percent in language arts and 90 percent in math.

Brenda is from a two parent family. Her family lives in a house across the street from the school. Her father works and the mother is at home. They have two other daughters, one in sixth grade and one in ninth grade. According to the teacher, the parents always come to parent conferences and call the teachers when they feel Brenda is not getting enough work in math and reading. Both parents attended the parent interview. Her father indicated, "By our being visible as parents, we want the school to notice we are interested." They also indicated that, "The school is crowded and the children don't get as much individual attention as they need." They stress with Brenda: "academics mostly, being articulate. We stress reading and writing, also being innovative and creative. We try not to handicap her at home. Children are to speak whatever is on their minds—respectfully so. They are to make decisions on their own. We do some role playing with them." The mother said: "There is no television during the week; it is off limits. We do try to keep a balance. There is also no Nintendo during the week either." The parents indicated they stress what they do in order to build self-esteem. They indicated that they planned for all of their girls to attend college.

Rural student portraits

Anette: a first grade Caucasian female, rural METRA Program

Anette has curly blonde hair, wears glasses, and is repeating the first grade. She was retained because of behavior problems. She appears to get along well with classmates and likes to play a lot during class time. She participates in METRA, the school's Chapter 1 reading program. Her initial CTBS reading score falls in the 54th percentile.

Anette's behavior, according to the reading teacher, "is erratic—one day she knows the material, and the next day she doesn't." Because of her inability to master the lessons, she has only progressed to lesson #19. At this point she is far behind the other METRA first graders. METRA provides Anette with the one-to-one contact and attention that she seems to want and enjoy. It does not however, change her classroom behavior.

Teachers indicate that Anette is a busybody, too interested in her classmates to pay attention to the teacher. The opinion is that Anette's behavior problems stem largely from her parents' divorce and father's departure to another state several years ago. Her mother indicates that Anette was devastated when her father moved away. She felt that the best way to hurt her father was to do poorly in school.

Diego: a third grade Hispanic male, CCC Program

Diego is a slim, quiet nine-year-old Hispanic male who customarily looks very serious but has an occasional smile that lights up his face.

He scored in the 8th percentile in reading and the 32nd percentile in math and is repeating the third grade. According to his mother, he gets up at 5 AM to get the bus for school because he loves school and never wants to be absent. His love for school is reflected in his active participation in class. He volunteers to answer questions, usually pays attention and is on task. He is not always dressed well and sometimes has an unkempt appearance.

Diego has been in the transitional ESL program for the past two years but is still having problems speaking and reading English. Based on his test scores, he has been referred to the resource room for reading. Students are responsible for going to the resource room alone, and Diego is reported to be "very conscientious and turns up on time." He was observed reading better in resource class than in regular class.

Diego lives with his mother and several siblings. He is the sixth child and third boy in the family. He has an older sister who is married. His father left the home last year, and the mother indicates that she "relied on Diego as the man in the family and put too much responsibility on him, which distracted him from his school work. He is doing much better this year. I get notes from the teacher telling me he is doing very well in everything." His mother also indicates that Diego brings all his books home every night because he is afraid someone will steal them—one night he brought home 11 books. Diego loves to play with cars, pretends he is driving, even pretends to put on the seat belt and shift gears. He wants to be a mechanic and she thinks he will be very good at it.

Bill: a ninth grade African-American male, CES Program

Bill is somewhat quiet, generally well liked by his peers, and likes to work in groups because, "You get to know the other students better and you can get help from other students." Bill is not involved in sports or extracurricular activities so group involvement facilitates social interaction among his peers. Bill does well using time in school to do his homework so he doesn't have to do it at home. He likes the fact that he is in CES because of the small classes, group work, flex time and he can get to know his teachers better. He has gone to the Math teacher for extra help in math. He helps in the family printing business after school. He is slightly below average in his academic performance on the CTBS/4 and scored at the 37th NP in reading and 49th NP in math.

Bill's mother indicates that his grades have gone up over the last year and his attitude about school seems to be more positive than it was in the eighth grade. He seems to really enjoy videotaping reports and has gained some self-confidence from doing it. She notes, "Last year getting him to write a report was like getting ten teeth pulled. This year he no longer waits until the last minute, he seems to enjoy writing them. Somebody is doing something right!"

Cultural and linguistic diversity in selected schools

The children that we observed for the whole school day analysis were chosen to represent racial and ethnic diversity. This diversity, not surprisingly, reflects the great variety among schools and communities in the sample. In this section, we examine some preliminary evidence concerning the effects of cultural diversity on the school experience of children and their families in three unique schools—schools that have a single ethnic identity and a large majority of non-English speakers among their population. The areas that we address are language, cultural values (particularly as demonstrated by parent involvement strategies), and instruction.

Language. The rural Hispanic school, called CCC-A Elementary School elsewhere in this report, has a population that is 98 percent Spanish-speaking. The students speak a language that is known locally as "Tex-Mex" as is the local border culture in which the school is immersed. All the teachers speak both

English and Spanish and most come from the same local culture; bilingualism is a condition of employment.

The school is attentive to its unique language status in three ways: 1) a formal ESOL program provides transition to children who speak no English, 2) instruction in Spanish helps children to develop fluency in their native language, and 3) the school is characterized by an ongoing and informal shifting back and forth from one language to another in the classrooms all day long. As children ask a question in English, they forget the English word and change to Spanish. The teacher generally corrects the word in English but if the exchange gets intense, both teacher and child may talk in Spanish until the issue is clarified. This ability to change languages makes it easier for teachers to illustrate new concepts, as in the example below.

The teacher was reading aloud to the third grade class a book called *The Wump World* that deals with pollution in cities. The word "skyscraper" caused a child to raise his hand.

"Please, miss, what is un skyscraper?"

"A very tall building—a building muy grande, muy alto."

"Does it go up to el cielo—hasta el Dio?"

"No, no, skyscraper is a word—una palabra que hace una pintura en su cabeza—it's a picture for your mind..."

The urban Asian school, called SFA-A Elementary School elsewhere in this report, has a population that is 75 percent Asian. The dominant Asian groups are Cambodian and Vietnamese but there are other groups as well, including some whose languages have very few speakers. The remainder of the student population is a mixture of African-American and White, as is the entire faculty of the school. The adjustments made by SFA-A to its non-English speaking population consist of 1) an ESOL program and 2) a transitional first grade which allows children to work in readiness activities until they are ready to move into first grade. The major purpose of the transitional first grade is to serve as a full-immersion English language program. The transition into English is filled with unexpected obstacles. The materials used for pre- and early reading at SFA-A include books that depend extensively on rhyme for teaching word sounds. These rhymes, which make good sense in English, can be difficult for Asian children. For example, an observer watched a tutor working with a Vietnamese boy on a story about Gus, who got on a bus and then got in a truck, carrying a duck. The boy repeatedly mixed up the story, getting the boy's name wrong. In SFA-A School, as in Vietnam, there are boys named Duc and families named Truc—but not a single Gus.

The Native American school, which we will call the Schoolwide-C School, is composed of all Pueblo students, who speak a language called Keres. Although the children speak to each other in Keres, the teachers use English in speaking to the students and all work is conducted in English. In one portion of a whole school day, the teacher reminds children who are working with puppets: "Remember, the puppets came from my house and they only learned to speak English! If you don't let them speak English, they'll cry." The para-professionals in the classroom are from the community and speak Keres. However, only two teachers at the school are Native American.

Cultural Values. Values are a delicate issue for American public schools that deal with populations of another culture. Our three schools apparently have taken somewhat different attitudes toward dealing with the values of their dominant cultures, according to data from the cases and the whole school day.

The CCC-A school fully reflects the values of the larger community, and we see little evidence that values are an issue. The school's parent involvement activities illustrate this. The school holds events in Spanish and serves Mexican food; all the school staff in the office as well as the counselors speak Spanish, and parents entering the school are always greeted in their own language. The school's sensitivity to parents is illustrated by the parent of one of the whole school day children who told the interviewers, through an interpreter, how important it was to her that, although she was poor, uneducated, and did not speak English, the school authorities sought her opinion on whether her son should be retained in first grade. The counselor presented the options to her and the advantages of each and let her make the decision. The mother had tears in her eyes as she explained the sense of efficacy this incident had given her.

In the SFA-A school's parent involvement activities, however, conflicting values between school and parents emerge saliently and cause some bitterness. According to the principal, the Cambodian and Vietnamese cultures are cultures in which parents are traditionally not involved in schooling—teachers are considered the "experts" on education and parents leave all decisions to them. The school, despite its best efforts, has not been able to overcome this attitude, which leaves staff feeling, according to the principal, that the school and its excellent program are not appreciated or valued in the community. The problem is exacerbated by the fact that no one at SFA-A except the attendance monitor speaks any of the languages of the parents and even she does not speak all of them. To compensate for this, the school has made a video narrated in Cambodian, Lao, and Hmong (with a male narrator) to help parents understand their responsibilities to the school and the school's responsibilities to them, but this too has not been notably successful in attracting parental interest.

The Schoolwide-C School is one in which extreme differences in cultural values exist in many areas. The Pueblos who comprise the school population maintain conscious boundaries between themselves and the white culture, including the tenets of their rituals, spirituality, and family life. The effect is to separate the school from the culture and to leave many teachers talking of "boundaries" and "outsiders." The cultural responses of students to stimuli is considered by one counselor to be "inappropriate—they laugh at everything, including another's misfortune. Crying is not allowed in their culture." In examining the whole school day observations, however, one finds little evidence that these immense cultural differences affect the daily routine. Even in the area of parent involvement, the Schoolwide-C School seems to have found a way to draw parents in, using a kind of carrot and stick approach. The school requires parents to come to school for a quarterly conference when report cards are distributed and the school holds a public ceremony to give out certificates and awards for children on the honor roll, which was well attended by parents.

Instruction. We looked for instructional strategies in our three schools that are employed in order to deal with cultural variation. We have already noted the instructional accommodation made to language at the CCC-A Elementary School —the use of informal bilingualism in the classroom. Thus far, this is all we have seen that modifies the curriculum to meet the needs of its Mexican-American constituency. Although the special computer-aided instructional strategy used at CCC-A includes Spanish software among its selections, the district has opted to use only units that build vocabulary in English. At the SFA-A School, the principal selected the special strategy, Success For All, because it met the school's emphasis on English language immersion (even to its phonetic emphasis) and because it involves a family outreach component that she hopes will alleviate problems of eliciting parent involvement. Finally, the Schoolwide-C School has adopted instructional goals as part of its schoolwide project that will help the Pueblo children increase their choices about their future—especially the girls, who historically have had only two choices ("having a baby at 15 or having a baby at 16"). Schoolwide-C is also attempting to meet some problems faced by its children by providing instructional units on alcohol education and drugs, which are taught by counselors.

Section II: Preliminary Findings

This section presents our findings using the Whole School Day analyses in two areas of QAIT — the quality of instruction as evidenced by the correspondence or lack of correspondence of the intended curricula and the curricula that students actually received; and time as evidenced by the amounts of allocated time and instructional time.

In Part 1 of this section, we summarize our preliminary findings from analyses of first and third graders WSD's on how students actually spend their time in school. In Part 2 we present analyses of the actual curriculum and instructional experiences of WSD students. Part 2 also includes additional analyses of the use of instructional time in specific Special Strategies Schools.

We offer these preliminary analyses with two caveats: one, our observations were recorded in narrative form, and inferences based upon time allocations extracted from those narratives are limited to information about the overall patterns of instruction; and two, the amount of time allocated to a subject is neither an indicator of the quality of instruction nor of the students' engagement and learning of the subject. These time analyses represent only the general allocation of time to subjects.

We have examined the Whole School Day reports for elementary students in the first and third grades. They typically spend their time with a single classroom teacher. The five high school sites have a unique scheduling structure, rendering cross-site analyses inappropriate. The descriptions outlined below are based upon the spring 1991 data collection.

Part 1: Preliminary findings—Intended versus actual time

We defined length of the school day according to the time students assembled in their classrooms in the morning until the time at which they were dismissed. Elementary school students' days varied widely, not only in the structure of the school day, but in actual observed length. The average length of an elementary school student's day was about five hours in instructional time (excluding recesses and lunch) but the length at some schools was seven hours. First graders' days ranged in length from 270 to 330 minutes, and the mean was close to 300 minutes. Third graders' days varied more, ranging from 285 to 420 minutes, with a mean of 310 minutes. These figures represent the actual amount of time students spent in school, and they differ modestly from the schools' published calendars.

It is pertinent to our discussion of the amount and percentages of time that our students' days included both planned and unplanned activities: several students had substitute teachers for all or part of the time while others had student or volunteer teachers; there were special assemblies, plant sales, fire drills, and circus rehearsals; in short, all the usual distractions were observed. Additionally, because we were also collecting other data (interviewing parents and staff) at our schools, some observations were curtailed in order to meet those needs as well. We have not included in our analyses the truncated Whole School Day records for the six students whose narratives are missing more than 30 or 35 minutes.

Table 4.4 summarizes the mean proportion of time observed for academic, electives, and non-instructional subjects for all elementary school students and for each grade. Students spent, on average, about 80 percent of their in-school time—again, excluding lunch and recess(es)—in instructional settings; the proportion of time in instruction ranges from 38 percent to 96 percent. The remainder of students' days was spent in electives or non-instructional activities. Instructional time includes reading/language arts, math, science, social studies, and computers not used explicitly for reading or math. Electives include library, art, music, health and physical education; such activities occupied a mean of 14 percent of the students' time, and ranged from 0 to 38 percent of the whole day. Non-instructional activities included administrative routines, transitions between subjects and/or locations, late arrivals or early departures by target student, and unscheduled bathroom breaks. Some non-instructional time is to be expected,

Table 4.4

Mean Proportion of Time Allocated to Instruction, Elective, and Non-instruction (in percents)

	Grade		
	First[1]	**Third**	**First and Third Combined**
Mean Proportion of Time Allocated to Academic Subjects Reading/Language Arts, Math, Science, Social Studies, and Computers	68%	66%	67%
Mean Proportion of Time Allocated to Elective Subjects Library, Music, Art, Health, Physical Education	14	14	14
Mean Proportion of Time Allocated to Non-Instruction Transitions, Administrative Routines, Housekeeping, Special Events, Unscheduled Bathroom Breaks	18	20	19
Total	100%	100%	100%

[1] There were 21 first graders and 20 third graders; the total number was 41.

Source: Studies of Special Strategies for Educating Disadvantaged Students, Spring 1991 Data Collection particularly when students move from one physical location to another. For these students, non-instructional activities occupied a mean of 19 percent of students' time, and ranged from 8 to 33 percent.

Table 4.5 displays the mean amount of time allocated to different subject areas by grade and for both grades. All 41 students for whom we have reliable Whole School Day data had reading/language arts. Reading/language arts uses more time than any other subject area; students spend, on average, two hours, or approximately 40 percent of their time in reading/language arts. When reading/language arts is compared to other subjects, its dominance in instructional activities becomes even more pronounced. While all students had reading, 16 (of 21) first graders, and 18 (of 20) third graders had math. The time allocated to math instruction ranges from 0 to 80 minutes, and the mean amount of time was 35 minutes. Only seven first graders and seven third graders had science, and fewer had social studies or computer instruction unrelated to reading/language arts or math.

One way to understand our observations of children through their instructional days is to look for similarities and differences between schools' published calendars, such as the wall calendars or schedules found in many classrooms, and what students encountered on a given day. We have published schedules for 13 of the 18 schools. Our comments here are merely speculative; because we observed on just one day, we are hesitant to comment about schools or teachers veering away from the published schedules. Nevertheless, we found some striking discrepancies between the published and observed amounts of time devoted to various subjects.

All schools' schedules assign the most time to reading/language arts, and the amount of daily scheduled time ranges from 135 to 220 minutes, a range within which our observations generally fall. All schedules also indicate that math is to be taught every day. Yet when we observed children, about a quarter of first graders and a tenth of third graders did not receive any math instruction. The amount of time scheduled for math ranges from 30 to 75 minutes; because a number of our students did not have math, the mean number of observed math (in minutes) was 35. Schools vary in the amount of time scheduled for other academic subjects, such as science and social studies, and in the number of days per week those subjects are taught. Several of the schools in this study, for example, place science, social studies, and health in the same time slot every day, so the amount of scheduled time may be as low as 20 minutes once or twice a week or can be as high as 50 minutes every day. During our observations, only a third of all students received science instruction, and less than 20 percent of our students received social studies instruction. We believe that, although these subjects are not necessarily scheduled on a daily basis, fewer students were receiving instruction in math, science, and social studies than we expected.

The published schedules also generally indicate the amount of time allocated to electives and "flex time," or time for arrival, departure, and conducting administrative and housekeeping tasks. On

Table 4.5

Mean Amount of Observed Time Children Spent in Instructional Subjects (in minutes)

	Grade								
	First[1]			**Third**[1]			**First and Third Combined**[1]		
	Mean	**Std. Dev.**	**Range**	**Mean**	**Std. Dev.**	**Range**	**Mean**	**Std. Dev.**	**Range**
Reading/Language Arts	124	(43)	37 - 199	125	(54)	25 - 244	125	(48)	25 - 244
Math	28	(19)	0 - 52	41	(25)	0 - 80	35	(23)	0 - 80
Science	9	(14)	0 - 40	13	(20)	0 - 55	11	(17)	0 - 55
Social Studies	4	(14)	0 - 90	13	(34)	0 - 150	9	(28)	0 - 150
Computers (not as part of Reading or Math)	6	(20)	0 - 45	7	(18)	0 - 60	6	(16)	0 - 60
Electives	44	(31)	0 - 114	38	(37)	0 - 103	41	(34)	0 - 114
Seatwork (no particular subject)	25	(28)	0 - 78	12	(20)	0 - 60	18	(25)	0 - 78

[1] There were 21 first graders and 20 third graders; the total number was 41.

Figure reads: The mean number of minutes a first grader had math was 28 (plus or minus 19), and the range of minutes allocated to math for first graders was 0 - 52.

Source: Studies of Special Strategies for Educating Disadvantaged Students, Spring 1991 Data Collection.

average, it is between 10 and 15 percent of the total instructional time. The proportion of non-instructional time we observed was 20 percent—higher, on average, than the scheduled percent. One school's daily schedule, for example, indicates that students have two recess breaks when our observations recorded that students routinely had three. At another school, the daily calendar indicates that students begin their days with 10 minutes of silent reading, while on the days we observed, students simply arrived 10 minutes later.

Part 2: Delivered versus intended curriculum

In this part, we present analyses of the actual curriculum and instruction experiences that students undergo in their special strategy sites. For each of the sites, we describe a student and present that student's Whole School Day observation, putting in *italic* type the portions of the school day that demonstrate components of the special strategy. This allows the reader to see immediately how much or how little of the school day is affected by the special strategy. Our analyses cover our three categories of special strategies: philosophical, schoolwide and adjunct, as follows:

Philosophical—	Comer School Development Program (Sites: Comer-A, -B) Sizer Essential Coalition of Schools Program (Sites: Sizer-A, -B, -C, -D, -E) Paideia Program (Sites: Paideia-A, -B)
Schoolwide—	Extended Year (Sites: Extended Year Schoolwide-A, -B) Urban Schoolwide (Sites: Schoolwide-A, -B) Rural Schoolwide (Sites: Schoolwide-C, -D) Success for All (Sites: SFA-A, -B)
Adjunct—	Reading Recovery (Sites: RR-A, -B) Computer Curriculum Corporation (Sites: CCC-A, -B) Tutoring (Sites: Tutoring-A, -B) Extended Time (Sites: Extended Time-A, -B)

This part also includes, for each of the elementary school sites, except the Comer sites, a description of the intended versus actual amount of time allocated to different subject areas in each site and how the school days are apportioned for the WSD students observed at each site.

Special strategies have been described previously in terms of the degree of intended impact on the organization of the school and the regular classroom instructional program. In Chapter Two, strategies were categorized as 1) *philosophical,* which are designed to change the underlying assumptions and restructure the school organization—varying from school governance to the nature of teaching and learning in schools. 2) *schoolwide,* which are designed to change school management and instructional organization and delivery, and 3) *adjunct,* which are by design supplemental to regular classroom instruction.

These strategies vary in the degree of prescriptiveness or adherence to a specific model of learning. Philosophical approaches seek to operationalize global principles to effect change in the teaching-learning process. Thus, there is a considerable amount of variation across sites, depending on the skill and expertise and training of teachers. This is also a major issue for most schoolwide projects. Although the framework and guidelines for schoolwide projects tend to be more concrete and specific; such as reducing class size, eliminating pullouts, and extending the school year or school day, the content and delivery of instruction is still highly dependent upon the classroom teacher and on the instructional leadership of the school principal. In general, adjunct programs tend to be highly prescriptive compared to philosophical approaches and tend to focus more narrowly on remediation within specific subpopulations. Within these approaches, coordination between the core instructional program and the strategy is a major issue in the instructional delivery to Chapter 1 students.

Philosophical approaches to Special Strategies

The philosophically-based strategies seek to address more than just the teaching of lower-level cognitive skills. For example, although the focus is different, all three programs—The Comer School Development Program, Sizer's Coalition of Essential Schools, and the Paideia Program—include a socialization aspect. The Comer Model encourages the development of a "social skills curriculum" to enhance the well-being of students, while Sizer and Paideia, in contrast, foster positive interactions among faculty and students in less obtrusive ways. The overall tone of Sizer's schools is to be one of unanxious expectation, trust, and decency. Paideia uses intellectual discussions as the basis for teaching students to interact in a positive manner with both their teachers and their peers. Additionally, all three programs stress the active involvement of students and teachers in the learning process rather than only didactic forms of instruction.

Perhaps the biggest difference among the goals of the three strategies is the emphasis placed on the development of cognitive skills. The Comer model seeks to improve the academic achievement of students through community involvement and meeting affective and social needs of children—there is no explicit emphasis on teaching critical thinking or learning how to learn. Sizer, however, emphasizes the development of learning skills by focusing on a few essential areas of knowledge. This development is enhanced by opportunities for interactions among teachers and students through reduced class size and through the use of coaching, discussion seminars, or investigative activities as primary instructional methods. Paideia includes both didactic teaching and coaching, but has as its centerpiece the teaching of critical thinking through Socratic seminars.

One of the major differences between the philosophically-based Comer, Sizer and Paideia strategies and either adjunct or schoolwide strategies is the lack of specific guidelines from the developers as to how to actually implement the programs. Although each of the models does include guiding principles, they do not deal directly with the "nuts and bolts" of implementing the programs in real classrooms in real schools. Therefore, the faculty and administrations of schools wishing to implement Comer, Sizer, or Paideia must translate general descriptions of the programs and their teaching methodologies into actual classroom practice. The formulation of and provision of staff development by local coordinators and/or administrators, then, becomes a critical part of the implementation process.

Analyses of curriculum and instruction in the Comer School Development Program Special Strategies sites

As described in Chapter Two, the most salient components of the Comer School Development Model that potentially influence classroom instruction include (a) parental involvement in school programs, (b) social development built into the curriculum, (c) fostering of a positive affective environment and (d) improvement of the academic achievement of students

In the following whole school day observations at Comer sites (and others that follow) ,we have put in italic type the portions of the school day that demonstrate components of the strategy in action. The reader can see at once how much or how little of the school day is affected by the special strategies.

Comer-A: Debbi's Day

Summary of observations. At Comer-A site, one can see the fostering of the student's social development in a structured manner through the WSD of Debbi. The teacher has implemented a program of behavior modification for the child. Additionally, the music teacher uses stickers to reinforce the children's good behavior. On this particular day Debbi does not earn one. Parental involvement is an important aspect of Comer's Model and its effects are clearly seen in Debbi's reactions to her mother's attendance at a school program. This program gives Debbi's mother an opportunity to reinforce her daughter's successes. Finally, Debbi is reinforced by her former kindergarten teacher who asks her to read her story to the younger children.

> Debbi is a first grader currently enrolled at Comer-A in the New England area. She is an African-American girl with dark brown hair pulled into a tight bun on the top of her head. She has medium brown skin and dark brown eyes. She is tall for her age (compared to her classmates) and has a wiry frame. She wears her blue uniform tunic and a white shirt to school everyday. She even has a blue cardigan sweater with her name written across it. Her long skinny legs stick out of her uniform like extended pegs and make Debbi seem a little awkward at times. Debbi is a highly emotional child. In one sense she is a bully to the other children, but yet starving for their friendship. She will not hesitate to be a leader in a group activity; however, if someone crosses her or makes her agitated she also will not hesitate to raise her hand or deliver a scathing remark sure to make the average seven-year-old cry. Despite the hardened surface there is also a very kind

and caring side to Debbi, but it is rarely genuine. It is almost as if she is afraid to care and to trust someone with her feelings. She can be quite manipulative. There is always an ulterior motive to her kindness, whether it be a momentary friendship, a cookie, or to participate in a particular activity. Rejection or denial always gives way to a highly emotional display. She is very easily hurt. When she came into the room she began talking immediately to her friends in the room. Debbi's first grade teacher is a middle-aged, Caucasian, middle-class woman. Her teaching approach is strong and disciplined, but genuine care and affection rounds out her "tough love" approach.

The classroom is filled in every nook and cranny with books, manipulatives, academic centers. The classroom bunny rabbit sits in his cage in the back of the room. The classroom is busy, but not overwhelming. The bulletin board to the far right of the classroom displays the work of the children. The surrounding cluster of desks from the far right of the room extending through the back and to the far left corner of the room incorporates a media center, a library, the science table. The teacher's desk sits adjacent to the reading table on the far left of the room. The reading table is a mere semi-circle of desks with the teacher's chair in the core of the semi-circle. Alongside the left wall near the front door are filing cabinets filled with lined paper, paper towels, etc. for the children. The middle of the room contains the clusters of desks for the children which face the blackboard. Plants abound in the room and add a "home" flavor to the monotony of the traditional classroom.

According to her teacher, Debbi is a bright child academically, but her academic growth is frustrated by her difficulty in establishing interpersonal relationships with other children and her refusal to acknowledge authority figures. Debbi scored at the 32nd percentile in reading and the 6th percentile in math. *Mrs. T has taken the initiative in her own classroom to intervene and somehow re-structure Debbi's behavior. Debbi is on an hourly behavior modification program due to her continual disruptive behavior in class. At the end of each class hour, Debbi receives a check on the board beside her name if she has behaved for that hour. The goal is a check for every hour of the school day. The behavior modification has made some difference in Debbi's classroom behavior, but there is still some improvement to be seen. This system appears to give Debbi the extra attention she seeks from Mrs. T through her constantly having to be aware of Debbi's behavior. Oddly enough, it also gives her the attention she seeks from her classmates. When Debbi receives a check, a friend might congratulate her. If she is on the verge of losing her check for the hour, she is encouraged by a peer to hold on for a little while longer.* Debbi is from a low-income, single parent home. However, Debbi's adoptive mother is very supportive of Debbi's progress in school. Although Debbi's mother has other children at home, she is also a volunteer in the kindergarten class at Comer-A, which allows her to provide on-site discipline regarding Debbi's behavior when necessary.

8:30 School officially begins. The children trickle into the classroom in a flurried mass of book bags and coats with a humming buzz of conversation. Breakfast is available to each and every child regardless of whether they are "free lunch recipients or not."

8:55 Debbi is still eating her breakfast. Mrs. T asks for a count of hands to indicate who gave their parents the letter sent home yesterday. Debbi shouts out and says she gave hers to her mother, but her mother tore it up and threw it away because she already had one from the kindergarten class.

8:58 Mrs. T gives instructions to finish eating breakfast, throw away trash, and clean desks off so she can start class.

9:00 Debbi is still eating and talking to her classmate sitting next to her, apparently oblivious to Mrs. T's instructions. The little girl sitting behind Debbi tells Debbi she should clean up her breakfast tray. Debbi responds by rolling her eyes and spitting a "dozens" joke at the little girl about the girl's mother. For example, "your mother's so dark, she has to smile at night so people can see her." Debbi laughs as she has accomplished her goal of hurting the feelings of the girl who foolishly dared to tell her what to do.

9:03 Debbi throws away her breakfast trash and as she approaches her seat she sees me and calls out loud, "Miss G is here, Mrs. U." She is no doubt proud of herself for remembering my name, but seemed almost stunned that I was there all along and she hadn't noticed my presence before.

9:05 Mrs. T gives instruction to take out a piece of paper and a pencil so she can administer the spelling test. Debbi is not prepared and asks permission to go in the hallway in her locker to get her pencil out of her book bag. The class has to wait for Debbi to get back into the room before they can start the test.

9:10 The test starts, but Debbi says she cannot continue taking the test because the little girl behind her keeps bumping into Debbi's chair with her desk. The little girl behind her did not bump Debbi's chair intentionally, but no one would be able to convince Debbi of that because of what she did to the little girl before. The spelling test consists of Mrs. T stating the spelling word, using it in a sentence, and repeating it once again.

9:15 Debbi interrupts the test once again to tell the teacher that another classmate is cheating off her test and she can't concentrate. The situation is treated as a trivial matter as Debbi often tattle-tales.

9:16 The spelling test is over and Mrs. T tries to make the transition into the class math lesson.

9:20 Mrs. T puts addition problems on the board and asks for volunteers to solve them. Debbi is still talking to the girl sitting next to her and paying no attention to the lesson or to Mrs. U. *Mrs. T notices Debbi's potential to get out of hand at this particular moment, so she moves Debbi's chair around to face the direct front so she can concentrate on the board.* Debbi cries and says that Mrs. T hurt her arm when she was moving her desk around. She puts her head down on her desk and continues to cry.

9:24 Debbi lifts her head and begins to pay minimal attention to solving the math problems on the board.

9:30 She begins to actively participate in the class and actually gets a math problem correct. She is very pleased with herself and with the admiration received from Mrs. S for doing a good job.

9:35 Debbi complains that her stomach hurts. Debbi rarely raises her hand and generally speaks out loud whenever she feels it necessary to be heard. *The children sitting next to her tell Debbi she got a check for her first hour of behavior. Magically, her stomach stops hurting. She even gives her sweater to the little girl sitting behind her when the girl complains of being cold.*

9:40 *Debbi seems to be very excited about being able to do another math problem on the board and begins to become engaged in the math lesson.*

9:45 *Debbi solves a word problem on the board and becomes even more confident and eager to press on with the lesson. Debbi reads extremely well and is proud that she could read the problem, interpret it, and reach the correct answer.*

9:50 Debbi's enthusiasm is fleeting and she becomes very fidgety and can't stay in her seat.

9:55 Debbi yells out to the teacher that the little girl behind her used her pencil and chewed on it. Mrs. T tells the little girl to please return the pencil and reminds them both about the no borrowing rule. Debbi still is not satisfied and said she doesn't want the pencil anymore since it is chewed on. Debbi also tells the little girl she wants her sweater back right now.

10:00 Due to the short schedule for today, lunch begins at 10:00 instead of 11:45. Debbi goes downstairs to her mother's kindergarten class to get her lunch. Her lunch consists of Oscar Meyer Lunchables, which is a small prepared box of lunch meat and cheese with crackers, cookies, and some juice.

10:15 Debbi comes back to the room and begins eating and socializing with her classmates.

10:20 Debbi offers her crackers and cookies to two little boys whose parents did not heed the notice sent home stating today was a half day and free lunch would not be distributed.

10:25 She continues to share her lunch with everyone except one little girl. Debbi says she won't share her lunch with her because she was fighting yesterday and she shouldn't fight. Debbi is definitely in her element by having control over the situation. She is the leader in the class because she is sharing her lunch with everyone, but can say who can have some and who cannot.

10:30 Lunch comes to a close and the room hums with chatter as children clear their desks.

10:31 Debbi tries to console a little girl who is crying by offering her some of her cookies. The children begin to line up at the door to go to music.

10:35 The Music class houses two first grade classes, which is an estimated 40 children. The Music teacher, Mrs. B has an assistant/volunteer, but it is nonetheless difficult to maintain quiet and order in the room. *Mrs. B reiterates that only children who listen and behave in her class will receive stickers.* Today Mrs. B has a music video of a scene from Walt Disney's *The Little Mermaid.* The song is entitled, "Under the Sea," and the song is subtitled for students who can read. Debbi appears to be interested and involved as she mouths the words to the song.

10:45 Debbi is unusually quiet and is actually paying attention to the other songs Mrs. B is trying to teach the class. One of the songs is "Brother John" in English and in French.

10:55 Apparently Debbi is bored by the song because they have been working on it since this fall and she begins to talk to others.

11:00 After being reprimanded by Mrs. B to pay attention, Debbi tries to stay on task. She begins to refer to Mrs. B as "Mom." The tone seems to be an attempt at a term of endearment to get back into the good graces of Mrs. B.

11:10 *Music class is over and Debbi is furious that Mrs. did not give her a sticker for good behavior. Debbi does not seem to realize or care that she did not receive a sticker because of her own behavior, instead she attributes it to Mrs. B not falling for her "Mom" trick. Consequently, in Debbi's mind Mrs. B is "dumb."* Debbi stomps down the hallway towards the classroom.

11:15 *Author Hour begins. Author Hour is a special hour at [Comer–B] during which students share with their classmates and their parents a story they have written the previous week. The topics are freely chosen by each student. Teachers give little direction, in order to encourage personal expression by the student. Only four parents, Debbi's mother is one, out of the sixteen children in the class show up. Debbi is beaming that her mother is one of the few parents in attendance.* She politely asks permission to go to the bathroom before Author Hour begins.

11:20 It is Debbi's turn to read her story. Her story is about a party she had for all her friends, how her mother helped her plan the party, and what a success the party was.

11:40 Author Hour is over and all of the children have read their stories.

11:50 Snacks are provided to students and parents and served as a reception after Author Hour. *Debbi's mother tells Debbi she did a very good job and she is proud of her.*

11:55 Some students ask if they can read their stories to their Kindergarten teacher from last year to show her how well they can write now. Mrs. T allows this. Debbi is one of the children to go to the Kindergarten room.

12:05 *The kindergarten teacher encourages all the first graders who come to her room to read their stories to her classroom to show them what they will be doing in the first grade. Debbi reads her story with rejuvenated energy and absorbs every positive comment from the kindergarten teacher.*

12:10 The group of first graders hear the bell and run off down the hall towards their classroom to pack up and go home for the weekend. Debbi runs behind them, saying good-bye to me as she tries to catch up with the other children.

Comer-B: Johnnie's Day

Summary of observations. In site Comer-B, the notion that schools should foster and develop trust and mutual respect between students and teachers is missing. Johnnie's teacher tries to manage her class using assertive discipline, which is unsuccessful. She then resorts to scolding and punishing the children. Punishment takes several forms. Children are sent into the hallway and to the office, and they are required to write an apology to the teacher, which they are ill-equipped to do. This last resort effort is ineffective as well.

> *Johnnie* is a first grader, a seven-year-old African-American male. Johnnie's classroom is large and is located at the top of the stairs on the second floor. The room has high ceilings and large windows. A medium size flag is hanging over the entrance door. The walls are decorated with students' art work, alphabet charts, and a map of the world. There is a small aquarium containing two little gold fish. There is also an old record player. The seats are arranged in rows. There is a small round table to the left of the room, and the teacher's desk is in the back of the classroom. The date on the chalkboard reads "November 1, 1991." The actual date today is November 12, 1991. Mrs. U. advocates using assertive discipline.

8:55 Johnnie walks in early to class, warmly greeting his teacher (Mrs. U.), takes off his heavy winter coat and begins to settle in. He is comfortably dressed in blue overalls, and has a cheerful and pleasant demeanor. The classroom with twenty eight students comes to order as Mrs. U. asks students to be quiet and listen to the principal over the PA system. Students listen to the affirmation, and pledge allegiance to the flag.

The first academic activity of the day for Johnnie is to read words from a list on the chalkboard in unison with his classmates while Mrs. U. points to the words. She also asks them to sound letters and words, and use them in sentences. Johnnie constructs a sentence with the work "sled." *The instruction is frequently interrupted, as Mrs. U. tells students to, "stop talking, pay attention, and start behaving well."*

9:20 Johnnie is socially active. He still does not have any paper or books on his desk, until Mrs. U. distributes lined paper to the class, asking students to copy the words from the board.

Johnnie is focusing on copying the words. He is filling in the appropriate lines identifying vowels and consonants in each word. He seems unsure of his own efforts. Continuously he is looking over his neighbor's shoulder to see what she is writing. Johnnie is one of the few well behaved students in this class. Many others seem to be losing interest, and are walking around, disrupting others: goofing off. This early in the morning the students show signs of boredom, disinterest, and are most inattentive.

10:05 Mrs. U. tells her class about their scout schedule. Students excitedly look for their scout scarves in their desks. Some help each other to put on and tie the scarves.

The scout teacher shows the new stickers that students have earned for good community work, and distributes them to each student. She then distributes a coloring sheet that contains a Thanksgiving theme, and students eagerly are coloring. Then she introduces the words for a new song to the students, and invites them to sing together a song called: "The Grand Old Duke of York."

Johnnie is not very interested in singing or coloring. He takes out an old, seemingly broken pocket calculator, and treats it with curiosity and care. He is not really involved in what is going on in class until Mrs. U. takes the calculator away from him and places it back in Johnnie's desk. Then the class lines up to go for a bathroom break.

During this short break, Mrs. S, the assistant principal, comes in with a *student who was sent to stand in the hallway for disruptive behavior.* Mr. S gives the student a wet sponge and a container of Ajax, instructing him to wipe off the crayon marks he has made on his desk-top during scout coloring activity. Mr. S waits patiently as the student finishes cleaning his desk.

11:30 Class resumes for Johnnie when Mrs. U. instructs her students to copy the list of words from the board and in front of each word indicate whether it is "N" for noun for "P" for past. There are 24 words in the list. Johnnie remains on-task most of the time during this activity. *As the teacher instructs the whole class as one, students find pockets of idle time and spend it waiting for their teacher to finish scolding the misbehaving and disruptive others.*

Johnnie maintains a well behaved manner, though he seems restless. By now he has unhooked his overall straps, and periodically pulls over his blue turtle neck sweater, covering his eyes. Many other students are clearly disruptive, running around and ignoring Mrs. U.'s pleas and screams. The interruptions are proving too stressful as Mrs. U., with a sense of resignation in her voice, lets her students know that she is fed up. *"I have had it!" she says loudly. "Copy the following lines quietly." On the board she writes: "I will respect my teacher, my school and myself."*

As students are finishing this assignment, she wants them to turn to the other side of their sheets and write a personal apology to her for their misbehavior this morning. The students, looking fearful, are quietly writing. Some clearly are lacking sufficient literacy skills to compose this personal apology statement. One student, reaching over, whispers to me, "How do you spell bad?" This method of discipline proves effective for about five minutes.

Then students are lining up for lunch.

1:30 Johnnie starts the afternoon part of his school day as Mrs. U. recites a story about a poor king. She wants students to join in and act out parts of the story. This activity lasts five minutes and she moves on to the next topic, which is natural science.

Mrs. U. holds a big chart that has colorful pictures of planets, stars, and the whole solar system. She illustrates and makes clear the distinction between "turning around" and "rotation." Students enthusiastically get out of their chairs and demonstrate their understanding of these concepts. Johnnie seems to love being active, and takes advantage of this activity and gets out of his seat.

Mrs. U. explains about each picture in the chart and asks students about the names of the planets. Johnnie does not recall all the names. He then receives another worksheet to work on. This is the third worksheet he has received so far this day.

The last class activity for the day is to sing a song. Mrs. U. opens the old phonograph and plays the song called "Three Little Ducks." She asks her students to sing along, and they do so happily and enthusiastically. The school day ends as students again lineup for the afternoon recess.

Analyses of curriculum and instruction in the Sizer Coalition of Essential Schools Special Strategies sites

As described in Chapter Two, the most salient components of the Coalition of Essential Schools' (CES) that would directly influence classroom instruction are (a) small class size, (b) coaching as primary instructional method, (c) interdisciplinary curriculum based on locally developed "essential" questions, (d) in-depth coverage of concepts, (e) demonstrations of mastery of skills and knowledge, (f) students as active learners and/or workers, (g) a tone of trust and shared values—expectations of success, (h) teacher as instructor, counselor and manager, and (i) cooperative learning groups.

CES site Sizer-A: Kathy's Day

Summary of observations. At CES Sizer-A, classroom instruction included several of the CES components as described in one student's WSD observation. During her social studies, Kathy encounters a lesson which involves an investigation-based project and coaching from the teacher. Although she does not explicitly receive coaching from her teacher, it does occur in her classroom. Kathy's biology teacher uses problem solving as the basis for his instruction on this particular day. Kathy's teachers seem to know her home situation and are concerned about her. Therefore, their roles in her life extend beyond that of instructor.

> *Kathy* is a ninth grade African-American female. She is 16 years old and is an Essential Schools program student. Kathy is an attractive teenager and seems well liked by her classmates.
>
> Teachers in the Essential School program indicate that Kathy is a good student, capable of doing the work although she has had attendance problems in the past. Program teachers carefully monitor student attendance in each class. They think this approach has had a positive impact on Kathy's attendance this year. Kathy likes the attention she gets from the teachers when they question her about her attendance or ask her what is wrong when she has her head on her desk. One teacher notes: "Kathy just needs some attention... sometimes they don't get that at home. If they come to school to get attention, at least they come to school. We have to get them here in order to help them."
>
> When asked if she liked the Essential School program, Kathy answered "yes" without further comment. She believes the program is good for most students, but wishes all students could be in the program. When asked why, she adds, "They (non-program students) think we get special favors and that we don't have to work hard. That is not true; we have to work real hard." However, Kathy feels that most classes are not difficult for her. When she has a problem, or doesn't understand something, it is usually because she has not concentrated on the work or has not read the directions well enough. She usually tries again, if she still has a problem understanding, she will ask the teacher for help. She likes the way the teachers help. They make them try first and they make them think. She likes the way they give them time and attention. Kathy said her favorite class is social studies/urban growth. She likes it best because they get to do interesting things about themselves. For example, they are now doing research about their city and their own neighborhoods. She also likes Mr. W and the way he teaches because he takes time with everyone. "He is serious with us but he also jokes sometimes."
>
> 9:00 Algebra I (Mr. I's class). Classroom is busy with student talk as they enter. Mr. I is talking with another teacher about students who missed class.
>
> 9:07 Kathy enters class talking with a friend. Seems a little tired and sluggish, as if she doesn't want to be bothered with her friend. Yesterday she seemed in better spirits. She sits with a group of five female students.
>
> 9:15 Mr. I .directs students' attention to polynomials on the board, noting that the work should be finished by the end of the period. *Kathy begins working with her group on the problems, helping when asked.* She informs them that she is not feeling well and would like to be left alone. The group members don't seem to pay much attention to her request,

as they continue talking about the problems. She responds with brief comments such as, "That's a minus, not a plus," but makes no real attempt to do her work.

9:30 Kathy tries to put her head on the desk and not be involved. Most of her group-mates are finished or have stopped working and started talking. Kathy has managed to begin her work and she now looks as though she intends to finish.

9:50 *Several students are still working in groups of about four or five students.* Much milling around and talking going on. Students are generally on task even though they are talking and walking around. Kathy gets up and goes over to another female student's desk and asks her, "Do you have any candy, I'm hungry?" The student answers, "No I ate the last piece I had before class started." Kathy returns to her seat, after being stopped by another student who said something to her.

10:15 Having been working at his desk for most of the period, *Mr. I. now begins to walk around the room, monitoring and helping students. "What made you decide to use this sign?"* he asks one male student. "I thought it was the right one," the student answered. "Well you better think some more," Mr. I. notes. "Talk to your buddies here. All that talking you were doing earlier should have helped you think of something better than that." Mr. I. moves to Kathy's group and notices they are not working at the moment. Kathy looks away as though she expects him to say something to her, or at least to her group. Instead, Mr. I passes and smiles, returning to his desk.

10:40 Whole class instruction. Mr. H. collects papers. Students are called upon for answers to the problems on the board. Kathy raises her hand only a few times, and is called upon only once. On one occasion she tells a student his answer is wrong. Mr. I. notes "Help him, don't criticize him." Kathy goes to the board and writes the answer. Returns to her seat and puts her head on her desk.

10:55 Algebra class ends.

11:00 Social Studies (Mr. W's class). The class is again talkative as they enter the room. Mr. W. talks to the observer about the class and what they will be doing this period. As he talks students are coming in asking him questions about a mixture of things from sports to their grades. It is obvious that he is a favorite teacher among both males and females.

11:10 Students work in groups of four to five in this class. Kathy is in a group of four with two boys. *Mr. W. reminds students that they are expected to do research not only in the library (to get information about their neighborhoods), but also local research in the actual neighborhood. "I expect you to get out there and look around the neighborhood, find out what buildings and other public facilities are there.* You must note these things on your map. We have already gone over this in class but we will repeat it as often as necessary. Some of you have not done all that you should have done at this point. If you need help, work with your group, or come see me. No excuses, when this project is due." Kathy has her head on the desk, not doing anything at present.

11:40 *Students are working in groups rather attentively.* Some students have city maps, while others have workbooks, census materials, and other information on demographics of the city. This seems to be a project that most of them are very much interested in, so they are all generally on task. *Mr. W. moves from one group to another, closely monitoring and making comments, "What are the streets bordering your community?" he asks one male student. The student seems hesitant. "Read the map, locate your neighborhood by name and look up the bordering streets."*

12:00 Kathy is observed talking with another group mate for a few minutes. She finally moves to another seat away from the group, puts her head on the desk and goes to sleep.

12:15 Mr. W. moves to another group, works with them for a while. He stops near Kathy's desk, puts his hand on her shoulder and says, "What's wrong with you?" She answers, "I went out last night and stayed out until three o'clock this morning and I'm sleepy." Mr. W.

says nothing and walks away. *Later he told me that Kathy is allowed to go out and stay out whenever she wants to. He decided not to say anything further to her, because he would rather her come to his class and get some rest than not come at all. He does not want students to dislike coming to school.. He notes, "If you can't get them here, you can't help them. Kathy is a bright student; I would hate to lose her."*

12:28 Kathy wakes up (five minutes) and talks to a classmate and puts her head back on her desk. Other students are still working.

12:40 Kathy wakes up again, goes to the trash can, deposits paper and talks with another female student. As class is about to end, she stands in front of her group, (I found out later that she is leader for this class), monitoring their behavior as told by Mr. W.

Social Studies class ends.

1:00 pm Lunch

2:30 Biology (Mr. I's class). This is a more "fast paced" class setting. Mr. I. immediately tells students to start drill on the board. "You have 10 minutes to do the drill; get to it. We have a lot to do in a short time." Kathy comes to class, speaks to the teacher for a few seconds to ask to be excused to go to the rest room, "It's an emergency," she says. Mr. I. says, "Okay, hurry back." Kathy leaves and soon returns as told.

2:35 *Mr. I. passes out worksheet containing case studies of individuals with a history of illness. Mr. I. explains that they will be working on bacterial diseases, diagnosing the case histories.* (They first work alone on drill, review of bacterial diseases, for about 10 minutes.)

2:40 Kathy goes to Mr. I. to ask a question. He reminds her to work on the drill before beginning the worksheet. Kathy does not seem interested in doing the drill. She goes back to her desk and works from the worksheet. She is not the only student who does not do the drill. After a few seconds Kathy stops working on the worksheet and commences to do the drill as instructed.

2:50 Mr. I. works with the class to review the drill and students answer questions as the teacher asks them. He asks Kathy a question and she says, "I don't know; I wasn't here yesterday." It seems more obvious that Kathy does not want to be involved with the drill, she would rather do the worksheet.

3:10 Students are told to work at their seats from the worksheet. Announcement over PA from main office indicating that students may pick up their report cards from homeroom teachers. They should leave the class at 3:20 to return to homeroom. Kathy asks the teacher for help or clarification concerning the seat assignment. She gets a biology book and resumes work.

3:20 Biology class ends. Students return to homeroom to pick up report cards.

3:30 School day ends.

CES site Sizer-B: Tammi's Day

Summary of observations. In urban site Sizer-B, Tammi experiences elements of the program. Her science teacher, while relying on a relatively passive form of instruction with his use of a film, stresses through his running commentary about the content of the film the relevancy of pollenization and plants to his students' lives. This, in fact, does help to involve Tammi in the day's lesson. Another component of CES experienced by Tammi is her daily TGA (Teacher Guided Assistance) period. And, while to the casual observer the "gossip session" that took place with this day's sub may have been a waste of time, to Tammi and her classmates, it could very well have been an important way to interact with adults in a positive manner. Finally, in Tammi's French class, the teacher engages the class in a lively discussion that includes not only vocabulary and grammar but also information about French culture.

> *Tammi* wears cut off jeans, ordinary T-shirts, and no make-up, unlike most of the girls in her class who wear longish hair with spiked mousse tops, lots of makeup and earrings, and colorful and suggestive clothes. She is a somewhat hyperactive and restless student, who appears to love being in school—for social reasons, but is not really interested in studies. She is cheerful, smiley, and friendly, and a constant source of irritation to teachers because she does not concentrate, does not pay a lot of attention, and is rarely prepared.
>
> 9:00 The second period class is science, which is to be a two hour block. (Tammi would have no math or health that day but would have a two hour block of science and a two hour block of English.) The science room is set up with a film projector and screen. The teacher explains that he will show films because it is very hot, and being near the end of the semester, the students are especially restless. Tammi sits at a front row table, with two of her male friends, including what appears to be her boyfriend. As the teacher explains what the first of three films will be about (pollenization and plants) Tammi is leaning on her boyfriend and playing with his hair. The teacher does not say anything about it.
>
> *During the film, the teacher gives a fairly frequent running commentary about the subject matter, trying to make it as relevant as possible to other experiences. Tammi is totally unengaged in the film or teacher presentation, and there is a lot of physical demonstration with her partner. She perks up during one section of the film dealing with pollenization.*
>
> 9:35 The bell rings; despite the fact that a film is in progress, the class boots out of the room for the break.
>
> 9:45 The class reconvenes for the second half of the two hour block. Before showing of the next film, the teacher announces that three of the students who missed a test would use the hour to take a makeup. Tammi is one of the three and is given the test. She does not have a pencil and has to ask for one from a friend. Lights are left on in part of the room for the three test-takers. For the first ten minutes she sort of looks at the test and does not seem to be writing. She is very restless. After ten minutes, the teacher passes by and scolds her for not doing the test, chastising her for not being interested. "You show no interest," he said. She wants to use a book. Apparently there is a pattern where part of the test must be done without a book and part with. She also does not have notes to use. After a while, the teacher sort of nods and Tammi gets the notes from a friend.
>
> The third film was less appropriate than the first two (the teacher admitted that he hadn't seen it in a while), and he turned it off. For the last seven minutes of the class, it was just down time.
>
> 10:30 The next period is TGA (Teacher Guided Assistance). Tammi's TGA teacher is absent, so a substitute was in the room. The sub is familiar with the kids; she has spent a lot of time with the bridge program. (Does this indicate lost of teacher absences?). *TGA lasts for about 20 minutes. The students just hang around talking to each other and the teacher. Tammi positions herself, sitting on a desk near the teacher and together with some other students chit-chats with the teacher during the entire TGA. It is like a friendly gossip session about malls and movies.*
>
> 11:00 Fifth period begins the double block of English. Once again, there is a substitute in the room because the regular English teacher is absent. The sub is obviously inexperienced, and although she had been helped by Judy to plan a lesson, she has trouble controlling

the class. She tells the students that they will have a writing assignment and gives out paper. It takes about ten minutes for the class to settle down. Tammi doesn't have a pencil and has to try and get one from another student.

The assignment is to write a paragraph about somebody that they like. Tammi plays around a lot of the time, and finally after a while starts to write. After she begins, she gets actively involved. However, she responds to any stimulus from a fellow student. She also passes notes back and forth with a friend.

The substitute does not know the culture of the Bridge Program and tries to maintain strict order, unsuccessfully. After the students finish the assignment she starts to collect the papers. It is the practice in the class to let students leave a few minutes early to get to the lunchroom. But she lets them go one at a time, holding four students back in silence until the bell actually will ring. Naturally, Tammi is one of the four students. The teacher's main altercation, however, is with another female student who becomes very angry and gets fresh.

Noon Lunch

12:45 Fifth period is a return to the English class and a rerun of the earlier period. This time the assignment is to write a paragraph about someone you do not like. Tammi writes some and plays with her hair a lot. The class gets even more unruly at the end.

1:30 Sixth period is Tammi's elective, the French class. (This class includes students in grades 9-12). When the class starts, Tammi is not there. She has been sent to her locker to get her book, after the teacher notices she has come in empty handed. The teacher has an overhead projector and screen and goes over some vocabulary and grammar points. *She engages the class in an interactive way, asking questions, and students answer. Tammi does not volunteer, but seems to be paying pretty close attention most of the time. The teacher also describes some culture of France in the context of the vocabulary and grammar lesson.* Near the end of the period, the teacher returns a test to the students. Many students do fairly well. Tammi got a score of 40.

2:20 Class is dismissed.

CES site Sizer-C: Nelli's Day

Summary of observations. A third student in the urban Sizer-C school, Nelli, like the two described above, encounters some of what is important to the program.. In her civics class, the teacher provides the students with an activity that requires them to become involved in their learning through critical thinking and interpretation. Later in the day, Nelli's English teacher, while not coaching the students himself, provides the opportunity for them to tutor each other during a vocabulary lesson. Like Kathy at Sizer-A, Nelli's teachers seem to be well aware of her home situation and her abilities, thus indicating they are more than just instructors to Nelli and that they are concerned about her as a whole child.

Nelli is an African-American girl who scored in the 47th National Percentile in Reading and the 37th NP in Math. She appears popular with her peers and indicated that she is passing all of her subjects. She was one of the program students selected to receive a scholarship (from a local philanthropist) and emphatically insists that she is going to college and wouldn't have babies like her older sister, a high school senior with two children

According to her teacher Mrs. C., Nelli is a bright, intelligent girl who she perceives as being "at risk" because of her home situation. The teacher indicated that Nelli's mother was an "addict" and that Nelli received little or no supervision at home. "She's left to raise herself."

Nelli's older sister is finishing high school late because she has had two pregnancies. The teacher also indicated that Nelli achieved a score of 1000 on the SAT. The teacher indicated that this was a typical day for Nelli. She misses a lot of school, comes in and is usually tired or very moody, but if she applies herself she can do the work.

8:15 Math Class. Nelli walks in and sits at the desk and puts her head down. She remains in this position for 20 minutes until the teacher, who is working individually with other children, notices. The teacher asks her what is wrong, and Nelli responds that she didn't get much sleep. The teacher instructs her to begin her math problems in the algebra book.

8:35 Nelli begins working on solving quadratic functions and there does not appear to be any problem. This is confirmed when the teacher (around 9:00) gets to her to check her work.

8:45 The bell rings, and students leave to take a break. This is a double period.

8:55 Nelli returns, and stops to talk to one of her friends about some upcoming social affair. This conversation lasts about seven minutes and the teacher reminds everyone to return to their work. Nelli stops to ask me what I'm writing. After I explain, she returns to her seat and continues to work on the problems. She finishes her assignment and passes her work in. She puts her head down on the desk until the end of the period. (9:35)

9:39 *Nelli goes to the next class—civics. The class is working on the interpretation of a court case. Nelli asks for clarification of the task. The teacher says you have to read and interpret the decision of the Supreme Court justice based on the article.* The decision is not in the article. Nelli says, "Mrs. C, I'm tired." Mrs. C. replies, "You shouldn't be up so late at night." The guys in the back of the room start teasing Nelli—claiming she likes to party. Mrs. C. calls the class back to order and asks Nelli if she has any more questions about the assignment. Nelli says no and begins reading the article.

9:55 She completes the assigned questions regarding the case and puts her head down on the desk.

10:25 The bell rings and students leave.

10:29 Nelli's fourth period class is "Life Skills" class. The teacher (a business teacher) discusses job interviews, careers. Nelli informed me that most of the time she and her friends sit around and talk. This was not a class she chose. So, we used this time to talk. I asked Nelli what she wanted to do after high school. She said she wanted to go to college and that she was in the scholarship program. She lives with her mother and her older sister (a high school senior with two young babies) and indicates it is very crowded. She indicated that she stays out of the house as much as she can and does not like to baby-sit. She emphatically stated that she wouldn't have babies like her older sister. She likes the [Special] program because of the teachers and the special attention they give her, even providing money for field trips if she doesn't have it. She feels that other students not in the program think it is easy and consider it "special ed." She definitely didn't like this perception. She asked questions about going to college; e.g., what it is like, what are good schools? Is there really a Hillman college (based on a TV show "A Different World"?)

11:15 Lunch

11:49 Fifth period. English. Nelli comes in and sits at a desk. Mr. I writes two words on the board. Everyone begins writing. He explains that everyone has to write a 15-word sentence beginning with the two words. Nelli finishes and goes to the front of the class to read her sentence. "Grades are important because without them you cannot go to college and get a diploma." (If there are no mistakes and the students read well, they receive three points.) Next, Mr. H asks students to go over vocabulary that was studied. Nelli pulls out her list (leer, bullish, hyperventilate, raze.) *Mr. I asks students to tutor each other.*

Nelli sits with Robert (extremely talkative boy) and they begin to chatter. Nelli asks Robert the words and the meaning, and Robert does the same.

11:55 Mr. I says OK—Inspection (hand on desk). He gives the definition and students are required to write the word (e.g., "group where everybody is similar," overbreathe, etc.)

12:05 Mr. I asks for papers, and corrects them. Nelli gets 100 percent correct. Nelli copies the homework assignment off the board and begins chatting with Robert until the bell rings at 12:35.

12:39 Sixth period. Health Class. The teacher is showing a video on CPR. Nelli sits at her desk and opens her health book to begin to read. The teacher tells her to close the book and watch the video. This lasts for 25 minutes. After, the teacher asks questions about what the class saw. Nelli does not raise her hand to answer and looks very bored. There is very little discussion.

1:15 Class ends and Nelli has physical education. We walk outside and she tells me, "I'm failing gym." I ask why. "Because I don't get dressed." She indicates that the only way she can make it up is to run so many laps around the track after school. We sit on the bleachers while she chats about her friends, and the high schools which she really likes, and what she will be taking next year. She indicates that I would not be able to reach her mother. The gym teacher comes over and reprimands her and tells her to start running around the track. Nelli complains that she didn't bring her sneakers and can't run in her shoes. Class and school end at 2:00.

CES site Sizer-D: Bill's Day

Summary of observations. At rural Sizer-D, several CES components are experienced by Bill. Bill's classes require him to be actively engaged in learning through mock trials, by answering probing questions posed by the teacher, through a problem solving/real work activity enhanced by both teacher coaching and peer coaching, and through engaging discussions of literature and a writing assignment requiring students to project themselves into the future. Bill spends part of his school day in a counselling environment where he has the opportunity to explore feelings and attitudes about life in general, although little discussion actually occurs. Another counseling session focuses on the immediate problem of coping with the fact that a family member is in the Persian Gulf during wartime. Additionally, Bill recognizes the coordination among his classes and appreciates the opportunity afforded him to interact with his classmates.

Bill is an African-American male in the ninth grade in a rural high school. He is a slightly below average student in his academic performance on the CTBS/4 (35th—50th percentile). Bill likes the CES program because "the classes fit together." The things that are covered in English relate to what is going on in social studies. He thinks this is better because it helps improve the understanding of what he is learning. Another thing Bill likes about CES is that the teachers have the students doing a lot of group work. He likes this because "you get to know the other students better, and you can get help from other students." He also said that working in groups puts him with students with whom he wouldn't normally interact, and in that way breaks down school cliques. Bill also likes the fact that in CES he can get to know his teachers better. He says that especially in flex time, when he goes to teachers for extra help, their interpersonal relations improve.

8:15 The school day begins in Ms. U's room, social studies. The first period is five minutes long to let it serve as homeroom period. The five minutes is easily filled with the day's announcements.

8:20 *Social studies begins with the teacher describing the next activity—the mock trial based on the American Indian claim to land that President Jackson wants to take away in (another) treaty. The students used the previous day to work in groups to prepare the court case and their roles in it. This is content that the class has already read and briefly discussed in class. The teacher describes how the court case is to be run and assigns a student to be judge. (The* court case is also being videotaped, but the students seem basically unfazed by the camera.)

8:23 Students begin the court case by calling witnesses. The lawyer asks leading questions of the witnesses to elicit information or feelings about why the Indians should or should not retain their rights to the land. Then the opposing lawyer asks the witnesses questions in an attempt to refute the information presented. The facts and opinions in each student's testimony are based upon what they learned in social studies class, and sometimes from outside sources. The on-task rate is generally high during the examination of witnesses, although the students who are listening talk within their group, planning what they will do to refute what the other side is presenting and other points they want to bring out in their testimony. Bill seems very attentive to what is happening. He is on the pro-Indian side and is called as a witness. He testifies about how the white settlers treated the Indians, and how the Indians were forced off of their land by the settlers and their army. He remarks that they have had treaties for peace and a place to live in the past, and they've always been broken. That this is the place they want to stay. They don't want to move again. After his testimony, Bill sits with the rest of the group, sometimes discussing strategies with them. At one point he has an idea while someone on the other side is testifying and passes it on to the pro-Indian lawyer. Clearly he is motivated by the activity and remains attentive. He also readily participates and has ideas to offer the group, suggesting he is well prepared to participate in the activity. The mock court continues for the rest of the period, and will also reconvene the next day. Students in the class are highly motivated, and as they walk to the next class are making plans to meet during flex time (free period) to gather more information and plan their presentations for the next day.

9:00 Class is over.

9:05 Math Class (pre-algebra). Ms. I. The initial activity involves the teacher giving directions on how students will go to the board to do last night's homework problems. Students at their seats are to check their homework.

9:07 While seven students are working at the board, the teacher reviews the terms and processes used in the homework activity (ratios and proportions). For the most part Bill is attentive, busy checking his homework answers. After all the students at the board have finished their work, the teacher leads the class through the problems. *She asks the students to explain what they did to get the answers. She asks them probing questions to get them to elaborate on what they did.*

9:15 The teacher elaborates on one of the problem types—using pie charts to represent percentages. Using derivatives of the homework problems about earnings in a variety of categories (job types), the students were to determine what percentage of the income was in each category and graph a pie chart showing the differing income sources.

9:22 The teacher begins a discussion of the new content, word problems which apply the concepts of ratios, proportions, and percent. The teacher has students turn to a set of problems in the book and models how to set up the problem given the information presented in the word problem. She does this by asking a number of questions to get them to identify the critical information in the problem, and where it goes or how it is used in setting up the problem. The teacher models setting up *each* of the problems for the students (she does all the hard work...leaving no problems for the students to practice what she has just modeled). Bill follows along intently, writing down each problem as the teacher sets it up. When the teacher asks him questions about the problems, Bill answers them quickly and correctly. He seems to be handling the problems fairly well.

9:35 The teacher provides time for the students to work the problems while *she circulates around the room checking students work and giving individual help as needed.* Students work independently. The teacher also takes care of management tasks like collecting late homework and extra work. The students seem to finish the practice activity very quickly... Bill works on the problems and basically stays on task. Meanwhile, many of the other students are off task and talking.

9:50 Class is over.

9:55 Mechanical Drawing Class (an elective). Bill comes right into the room and immediately gets to work on a computer-assisted design (CAD) system. He is very focused even though I interrupt him for a couple of questions. (He answers politely and thoroughly, while staying focused on his task.) The *mechanical drawing class is organized around a long series of drawing tasks described in the textbook. The teacher provides a little initial instruction related to the drawings in the unit (not observed), then students begin working through the drawing activities. Students are to draw assigned drawings by hand, using standard pencils, rules, compasses, etc. Then the student can use the CAD system to draw and print the same drawing.* As the students work independently the teacher circulates and gives the students individual help. *At one point Bill has some questions about how to do specific things on the CAD. The teacher provides excellent individualized instruction. I also witness a number of times when students help their peers with questions about the CAD or about the aspects of drawing their assignments. Not sure if this is a planned peer collaboration, or if it just happens and the teacher doesn't mind.* Throughout the class Bill seems to be really motivated (especially by the use of the computer) and seems to really like what he is doing. He also seems to have a good understanding, judging from the explanations he gives to me when I ask questions.

10:30 Class is over.

10:35 Flex time. Bill goes into the room and immediately starts working on his math homework. Looks like he doesn't want to have any schoolwork to do when he gets home tonight.

10:55 Bill is finished with his homework, and relaxes in his seat. I take the opportunity to interview him about school and CES.

11:15 Class is over.

11:20 Lunch.

11:50 Active Communication Time (ACT) class with the choral music teacher. *The goal of ACT is to have the students meet in small groups (e.g. 12-15) with a teacher and talk about life, feelings, attitudes, etc. The ACT class was started to improve the school environment for students, to personalize it, so fewer students would feel alienated in the departmentalized high school setting. This isn't psychotherapy, just group discussion that taps students' ideas and feelings.* The students sit down and the teacher reads for 20 minutes out of a book by Roger von Oech about creativity. The students listen (sort of) although some seem to be tuning out. Bill just sits quietly after staring at the floor or the wall. There is no discussion, and the students and the teacher seem to be glad when ACT class is over.

12:15 Physical Education Class.

1:00 English Class. The teacher starts with some administrative details about assignments that need to be turned in, etc.

1:02 *The teacher initiates a discussion about the short story the students have been reading about a futuristic society that has been using computers and computer-guided missiles* *so people do not need to participate—other than planning—and people do not die.* Then they discuss how one character in the story reintroduces humans into the guidance of missiles because humans can respond more rapidly, improving the missiles' chance of hitting its target. Why does this change war and people's attitudes toward it? asks the teacher. Students realize in their discussion that war means loss of human life, but in the story that is OK. with their society. *Students are somewhat upset by the story's presentation of a society where life is not important.* How can society become that way? asks the teacher. Students realize through discussion that overpopulation leads to decreased value of life and more impersonalization, and use examples from cities with high density population versus more rural areas (like where they live) to show impersonalization and less caring for others. *Bill actively participates in the discussion.* He answers questions and responds to comments made by others, sometimes referring to the text of the short story to support ideas. He doesn't talk as much as the other students, but he clearly is engaged and understands what is being discussed. He is on task most of the time. The activity seems to be appropriate for the students and the way the teacher poses the questions stimulates a lively discussion.

1:11 *The teacher assigns a composition about what students' think life will be like in the future.* He discusses some of the ideas students should consider in their writing. Use the story and its ideas as a potential jumping off point.

1:12 The teacher prepares students for the next short story they are going to read by discussing canals that were built in the 19th century, using examples of a local canal and what the students know about the Erie Canal. The students know a lot about the Erie Canal because they have recently studied it in social studies. Then they look at the first page of the story to determine the literary style; it is written in the third person where the narrator is omniscient—can tell what some of the characters are thinking. Bill is quietly on task, listening to the discussion. He doesn't volunteer, but does make comments when called upon.

1:23 The students begin reading the story silently, while the teacher engages in paperwork activity. Bill stays on task very well, again he seems determined to finish his homework in school so he doesn't have to do any at home. He seems efficient in his use of time.

1:40 Class ends. Bill has finished the short story.....still ahead in the homework game, all done.

1:45 Science Class. There is a substitute teacher in today. The scheduled activity is two film strips about different types of insects. The film strips are antiquated and too simplistic. Most of what is presented to the students is elementary school level knowledge, and the students readily remark about that as the filmstrip is on. On-task rate is about 50 percent at best; hard to tell how many are really watching the filmstrips in the darkened room. Bill is only marginally attentive, often making comments about how little new information is being presented, "I knew this stuff in third grade."

2:10 The teacher tells the students to use the remainder of the period working with their previously assigned small groups (2-3 students) to complete their report. *Each group is assigned a different class of insects and they are to describe the attributes of the class, list a number of examples of insects in the class, and draw an annotated picture of one.* Students use various reference materials around the classroom to complete this task. Most of the students stay on task during this activity, roughly 90 percent rate. Bill works well with his partner, both seem very goal directed—wanting to complete this task.

2:25 Class ends.

2:30 Typically Bill would go to General Business class (another elective) during this period. However, today *he goes to a support group for students who have close relatives in the Persian Gulf War. Bill's uncle is in the Persian Gulf.* Not much discussion. A couple of students ask questions, but generally it is just the guest speaker talking about working on humvees (what the Army now uses instead of Jeeps.)

3:15 School is over. Bill heads home.

CES site Sizer-E: Dick's Day

Summary of observations. At rural Sizer-E, Dick encounters only a smattering of the components of CES during his school day. His Agriculture teacher encourages the students to actively discuss the poultry industry. And, his carpentry teacher requires that students demonstrate mastery of skills and knowledge in his class. (Production technology, agriculture, and P.E. were the only classes all day that seemed to actively hold Dick's attention. Unfortunately, the production technology class involved no reading or even applied math, and the teacher made no attempt to relate the work to anything which most people would call an "essential" skill.)

> *Dick* is a big, sandy-haired Caucasian student. He is likeable, easygoing, and his greatest interest in school is playing football. Dick's family lives in the country a few miles outside town. His father is a security guard at a state psychiatric institute. His mother is a housewife. Dick has repeated a grade and is a year older than his peers. This is his first year in the public schools. He thinks that the high school, with its 600 students, is "too big" but otherwise thinks it "okay." He's taking "the required courses: English, math and stuff." He's also choosing other courses so that he has enough hours to meet school requirements. He's taking agriculture and small engine repair.
>
> Dick's ambition is to play college football, but if he can't play football, he probably won't go to college. On the freshman football team this year, Dick played offensive end and defensive tackle. Being a year older than most of his peers, he's a big kid for ninth grade. Dick is not sure whether he'll play football any more.
>
> Dick describes himself as an "in-between" student. Neither a "real smart" student "who works hard to get A's all the time" nor a goof off. He says that he tries not to make trouble, but that he doesn't want to work hard enough to make A's. Dick scored at the 41st percentile in reading and 30th in math.

8:00 Dick arrives at homeroom and sits compliantly while the teacher goes through the morning's tasks. (The teacher is a long-term part-timer at the school who would very much like to get a full-time position. She isn't happy about being observed.)

8:15 Language Arts (Same teacher). The class is going through a short story, "A pearl of great price." (The material is potentially interesting but the fashion in which it is being presented would interest very few people on earth.) The students look as though this is a typical day in this language arts lesson. They keep a constant social hum throughout the room and the 49-minute session. Dick is one of the best "behaved" students in the class.

9:04 The bell rings. Both the students and teacher seem glad this one is over. Dick heads out to his next class, which begins in six minutes at the other end of the campus.

9:09 Physical Education . Phys. Ed. is phys. ed. Dick enjoys it, although I'd be frustrated with a 49 minute change—form teams—play ball—shower—and dress for the next class period. All the boys seem to like it. Dick does not seem appreciably more athletic than most, just a little bigger. He's not slow-moving, but not particularly quick either.

9:58 Introduction to Agriculture. The teacher is an even-tempered, very likeable male. He's been teaching here for nine years, and is one of the teachers who almost certainly will be "let go" this summer. As was the case with Language Arts, Dick sits about three rows from the front, all the way to one side of class. The class is all-male, and almost all ninth graders. *The day's lesson is on poultry. The class discusses different kinds of chickens, what each is good for, how to order birds, when to call the vet and so on. The consensus,* *one guided by the teacher, is that while chickens are interesting, poultry is now big business, and none of these kids are likely to ever get into it. Still, the discussion had often been lively and Dick seemed interested.*

10:52 Algebra 1/2 This is an "in-between "course for students judged not ready for algebra, but who possess some potential. The lesson is straightforward math: review, presentation, asking questions, working problems, going over homework, assigning homework, independent seat work. As was the case in language arts and agriculture. Dick works along quietly and seemingly willingly. Not much seems to stir him. Dick had not done his algebra homework. By the end of class his teacher catches up with him and reminds him that for tomorrow he must complete two nights homework. He responds, "Yes ma'am."

11:41 Lunch

12:21 Study Hall. The school's study hall is a large room beside the library. Desks are in long rows. Dick settles in and dozes off. His promise to do two nights math homework seems far away.

1:10 Introduction to Life Science. Dick is back into his "contentedly passive student" role. He doesn't seem to object to this status. As the class reads along from the book, the teacher stops periodically, asks questions, and follows up occasionally with higher order "think" questions. After class the teacher tells me that CES has rejuvenated his teaching and his career. He seems to honestly believe it's a good thing.

2:05 Production Technology—*If ever there were a "student as a worker" class, this is it. Dick is on a small team that has taken a lawn mower completely apart and has now put it back together. Today's the big test. Last week it would hardly run and belched smoke. Today the teacher pulls the starter cord and voila! A reasonably smoothly running (if old) lawn mower. At the end of the period the kids clean their tools, put everything back in its proper place, wash their area and their hands, and head out to their next class.*

Analyses of curriculum and instruction in the Paideia program special strategies sites

As noted in Chapter Two, the most salient components of the Paideia Program are: (a) didactic instruction for "acquisition of knowledge" (b) coaching to improve student skills, and (c) Socratic seminars to enhance understanding of ideas and critical thinking.

Brad's experiences during Paideia-A's Wednesday Revolution show one student's encounter with a Paideia seminar and coached follow-up activity conducted in an ESEA classroom consisting of 30 children and two teachers.

Paideia-A site: Brad's Day

It's Wednesday Revolution—the Paideia seminar day at Gardenia School. Brad is an African-American third grader in a Chapter 1 classroom. He scored at the 9th percentile in reading and the 15th percentile in math. The Chapter One class at Gardenia School begins this day (5/15/91) with Brad coming from the cafeteria where he has eaten breakfast under the lunch program. Brad begins his day by reciting the pledge of allegiance and getting into a scuffle with Terrence, who shares his desk. A loudspeaker announcement settles the class, but not before Brad takes the opportunity to sock Terrence again. The teacher goes around the room to determine who has prepared questions for the class. Brad has not. He says he went to a baseball game until 10:00 p.m. the day before.

The teacher begins the seminar by getting students to discuss their story.

9:20 *The story has been summarized* and Brad is looking at his book and yawning occasionally. He has not been called on to this point. nor have students initiated any questions related to the story.

9:35 The teacher has continued the study of this story with an emphasis on comprehension. Brad is looking tired and puts his head down on the desk—it could be the heat as the room is approaching 95 degrees.

9:40 *The teacher is discussing an element of the story where the heroine is concerned about other's feelings about her. The teacher asks "How would you feel if someone gave you away?"* Brad asks, "Why would people become embarrassed by their feelings?" (This relates to the story). Students do not respond to his question nor does the teacher. *Brad has a second interaction opportunity about ten minutes later when he is asked to read to the class from the story.* Brad does this by reading about two paragraphs. He reads haltingly but with expression. He makes one or two errors in each sentence. The teacher complains that many have not read the two or three assigned pages. Students read more aloud; Brad is tying his shoe for a few minutes during this time, but he does appear to listen to the reading of the story. The reading and related comprehension questions go on until 10:10 am or later with Brad attending to much of the story, although he flexes his muscles or looks at others from time to time.

10:20 The story seems to be lost with over 13 children off task. Brad is on occasion one of the off-task students with his interest focused on items in his desk or book bag. *The seminar ends at 10:40 and the teacher begins to give directions about a follow up writing activity called "The Day in the Life of a Gym Shoe."* Students then begin an exercise routine behind their chairs. Brad joins in this and appears to enjoy the activity. Brad looks at his blank paper as the teacher gives some background to the writing activity. The lunch tickets begin their rounds at this time and students begin to talk rather than doing the assignment. Brad talks to Carl at this time.

12:10 Students start their lessons again with the stories they have begun this morning. Brad has the title for his story, but he has not written anything at this time. He does not begin the task for a few minutes and then the teacher restates the lesson.

12:22 Brad has his head down and is writing. He continues working for some time.

12:30 The teacher notices Brad's behavior and says," Hey y'all, I like the way Brad is writing." The writing activity continues for another few minutes and then the students are asked to put their materials away. The teacher begins to talk about mathematics. Brad gets ready for the new lesson. He participates in the regrouping activity and appears to understand this clearly. He works during the entire period. During interviews his teacher states that she considers him one of the most able students in the class in mathematics. This appears to be the case as he remains enthusiastic throughout the period.

1:05 The students are given a contest on mathematics patterns. Brad goes right to work. He finishes third and has four of the five questions correct. He receives a prize—a "sticker." He seems pleased with the class success. Only three are given out. Students move to the computer lab for their next class. Brad seems interested and does well on the computer. He is one of the more advanced students and is working on his times table (4 x 2). The students remain at the class for half an hour and Brad works the entire time. Upon return, the class begins a lesson on corn. This science lesson also seems to interest Brad, and he stays with it until the end of the day when he packs his bag and heads for the door.

Paideia-B site: David's Day

Summary of observations. The following description of David, a third-grader at Paideia urban Site B, shows an example of coaching using the school's computer lab. Moreover, it shows that sometimes the teacher will use Paideia seminar leader behaviors even though the lesson is not during the school's

Wednesday Revolution, and that sometimes the children will use Paideia discussion behaviors even though they are not in seminar and even though the teacher does not prompt them to do so. David's teacher asked open-ended questions during a reading lesson and referred the children to the text — both seminar behaviors. The children began responding to one another and questioning each other's responses during the same non-seminar reading lesson.

> *David* is a third grader in Mrs. N's class. He is a white child with dull, straight blond hair and sometimes wears glasses. He is small and rather thin and wears jeans and T-shirts to school. He is a quiet child in class, and although at times he seems eager to be involved in the activities, his attention is short. He spends much time playing with his fingers, digging in his desk, and playing with small objects he has found in his desk. David is in the Chapter 1 After School Program. His Chapter 1 teacher believes that he is unchallenged by school. David scored at the 24 percentile in reading on the CTBS and at the 36th percentile in math, and receives free lunch.
>
> According to his classroom teacher, David works on a low second-grade level in everything except social studies and science. She also believes he works at the second-grade level in math. She says that he has made some progress this year. She has daily contact with David's Chapter 1 teacher so that they can complement and reinforce each other during the regular school day and after school. This contact helps the regular classroom teacher know the problems David is having and the kinds of activities he's doing in Chapter 1.
>
> David likes math because he feels that he's good at it. He also likes P.E. because he enjoys the different activities. Outside of school, he likes to ride his bike because he can get to his friend's house faster with it. He also likes to watch TV, especially movies, and to play Nintendo because of the variety of games.

7:45 As the children arrive at school, they enter the classroom, park their jackets and knapsacks in the closet, and begin to read silently.

8:05 The PA system comes on for announcements, the pledge of allegiance and the singing of "American the Beautiful." The class then moves to show and tell. Following this, the children search in their desks for books the teacher wants to check numbers on.

8:14 The teacher assigns the rereading of the seminar story. The children are to write unfamiliar words on paper along with any questions they have about the story. David is playing with objects from his desk; one is a bandana.

8:18 The teacher directs the children's attention to the board for their spelling sentences. The children get out their spelling books, and one reads the list of words from the book. Although he has his book out, David is inattentive until a dispute over a book arises. The teacher asks the class how the dispute could have been avoided. Several students offer suggestions. Then the teacher returns to the lesson. David's eyes are on the teacher and he listens. The children use the spelling words in a sentence.

8:28 The teacher gives directions for small group writing. David is attentive to her directions, then begins pulling things from his desk. The students are to work in small groups filling in blanks in the sentences the teacher has written on the board which use the spelling words.

8:30 The teacher rearranges the room to make small groups of 3-6 children. She has to use the lights to gain their attention during the move.

8:35 The teacher goes over the first sentence with the group and demands quiet from them. David is involved in the activity. The children first work individually on the sentences while one in each group acts as monitor. Following time for each sentence by individuals, the teacher goes over the sentence with them.

8:52 A woman comes to the door, and the teacher goes out to speak with her. The children wait quietly for her to return. Some finish the sentence she has started. When the teacher returns, several monitors report misbehavior to the teacher. David has worked quietly during all this.

9:05 The teacher takes up the paper of children who have finished. David is not one of those.

9:10 Rest room break.

9:24 The teacher turns off the lights in the room to get the children's attention to begin class. She gives them directions for a small group review of the assignment just completed. Each group is to have a scribe and fill in blanks in sentences on the board using the words. David is involved in this assignment.

9:37 The teacher begins checking the assignment on the board with the students. David is attentive to the teacher as she begins this. Several minutes into the small group work which is no longer led by the teacher, David begins playing with his pencil and rubbing it on his arm. The teacher comes to check his group's work and they resume their activity.

9:46 The teacher begins going over the exercise with the class. David is at first attending to the other boys in his group, then his attention moves to the board.

9:52 The teacher pulls six children to send to the library for books on particular topics to be used later in the day. David is not one of them. The teacher collects each group's paper.

9:53 The teacher begins today's reading lesson. She directs the children to get with their reading partner. Some children distribute the reading books. Before she actually begins the lesson, the teacher gives fluoride treatments to those who are to take them and reprimands the children for their behavior thus far this morning.

10:09 She tells them to open their books. Seven pairs of children share books. The rest have their own copies. *The teacher begins a discussion of "Dick Thompson, the Selfish Boy." Some of the teacher's questions are open-ended and the children begin responding to one another and questioning each other about their responses.* David and his partner are inattentive to the discussion. *Then, the teacher has a child read a portion of the story aloud.* David listens to the reading. *The teacher directs the children's attention to a picture in the book and asks them more questions, some divergent and some referring directly to the text.* David is called on to read a page aloud and the questioning/reading pattern continues. David soon loses interest and begins interacting with his partner. The reading and discussion of the story end at 10:34.

10:34 The teacher begins a grammar lesson by asking the children what they've been studying in grammar. The answer is present verbs. The teacher uses the story to practice picking out present tense-action verbs. David is attentive during this. This ends at 10:42. The teacher rearranges the children's seating back to their original places and asks a girl to pass out magazines to the class. They are to find ten action verbs in the magazines and cut them out. David is on-task after one minute. The teacher leaves the room with the assistant to monitor. When the teacher returns, she helps the assistant in monitoring. They will check the verbs before the children begin cutting them out. David raises his hand and leaves it up for a while. When he gets no attention from either adult, he becomes inattentive and begins to interact with a girl in the seat next to him.

11:00 The teacher tells the children to close their books and prepare for lunch.

11:58 The *class returns from lunch and recess and goes to the computer lab.* Since most of them have been "good" during the morning, the teacher gives them their choice of programs to work on this day. Eleven children are at tables around the periphery of the room working on math problems. [Children whose names have been put on the board for disciplinary purposes during the morning are not allowed to work on the computers.] *Fourteen get diskettes and begin either Word Munchers or Number Munchers. David gets Work Munchers and begins. He remains involved with the program until about 12:31 when his attention begins to wander.*

12:44 *David is back on-task with his computer for several minutes before his attention is diverted by the boy next to him. The children work in the computer lab until 1:00.*

1:15 The teacher gets a boy to pick up the reading books and directs the children to get out their math books. They are assigned 14 problems in which they divide by seven. David begins working immediately, but several minutes later his attention is diverted to two other boys at his table. By 1:32 most of the class is finished with the problems. They begin milling around the room. Some watch the teacher at her desk while she completes weekly reports to go home. Others pack up their books and get their jackets. The teacher collects the math assignment at 1:34.

1:34 The teacher directs the children to read in encyclopedias about pigeons, doves and rats. They must share since there are not enough books to go around. They are to write down whatever they find about the animals. They will report their findings on Monday. The teacher passes out paper for them to write on. David works with a boy and a girl.

1:52 The teacher begins handing out progress reports to go home while the children continue their reading and writing. David and his partners remain on-task.

1:55 A mother appears at the door to collect her daughter before it starts to rain.

2:05 The teacher tells the children they may take the encyclopedias home to complete their assignment. Announcements over the PA end the day.

Instructional time at sites Paideia-A and -B

The instructional school day at Paideia-A (third grade) is almost five hours (290 minutes). All three children had reading/language arts, including one child who participated in a 90 minute Paideia seminar. All had math as well, one had science, and two had electives. The mean proportion of non-instructional time was 20 percent.

The school day at Paideia-B (third grade) is 325 minutes long. Both children observed had reading/language arts. The two each had math but neither had science, and one each had computers and social studies. Neither had electives, and the mean proportion of non-instructional time was 12 percent. Both participated in the Paideia seminar (which occurred on another day of the field work).

Analyses of curriculum and instruction in the Schoolwide Projects Special Strategies sites

Schoolwide approaches are designed to change the management, organization, and delivery of instruction within Chapter 1. Unlike adjunct programs, schoolwide approaches are designed to upgrade the regular core curriculum and improve the opportunity to learn for all students. The emphasis on local adaptation and site-based management results in considerable variation across SWP sites. Because of the global nature of schoolwide approaches, the intended curriculum may be viewed as an eclectic combination of several interventions. (e.g., programs to raise student-self esteem, increase parent involvement, improve instruction). In most sites, a major thrust of the interventions is to minimize or eliminate the "traditional" instructional delivery of Chapter 1 "pullouts" and improve the quality of instruction delivered to all students. The schools in Special strategies accomplish this end in a variety of ways—reducing class size, extending the school day, using collaborative teaching within the classroom.

Across the eight schoolwide projects in special strategies, a common feature is to reduce class size and provide teachers with para-professional or specialist help in regular classroom instruction. The intent is to provide additional instruction to students who may require more help. This help could occur as individualized instruction, instruction in small groups, monitoring of student's understanding, reinforcement and practice with para-professionals. Because reduced class size to produce more individualized attention to students is a major concern of schoolwide projects, the WSD's of students that follow highlight observed individual attention between teachers/aides and students.

In the extended year sites Schoolwide-A and -B in first grade, numerous instances of monitoring and instruction and teacher-student interaction were observed in the reduced size classroom. In urban site Schoolwide-A, the reduced class size is combined with the emphasis on using specialist teachers inside the classroom to provide small or whole group instruction. In Schoolwide-B, the primary emphasis is on instruction by the classroom teacher, and the academic instruction continues 22 days into the summer. In both of these sites, an emphasis on incorporating "whole language" activities and an instructional framework based on the Madeline Hunter model combined to influence the delivered curriculum students received. In rural project site Schoolwide-C, the delivered curriculum in smaller classes resulted in many instances of small group instruction, using math manipulatives. However, reduced class size alone does not guarantee that individualized or small group approaches will be used. The instruction students received in Schoolwide-D provides an illustration of the failure to take advantage of smaller class size.

Two urban schoolwide sites have implemented Success for All (SFA). An intent of SFA is to have all third graders reading at grade level on time. This strategy employs one-to-one tutoring, continual monitoring and regrouping for math and reading, and 90 minutes of reading and language arts instruction. Because of the prescriptive nature of the strategy, it shares some of the characteristics of adjunct strategies; however the program is implemented schoolwide.

Extended Year Schoolwide Components

As described in Chapter Two, components of the extended year schoolwide projects which potentially influence the classroom instruction that students receive include (a) reduced teacher student ratio in grades K-2, (b) an extended year component which adds 19 days to the school year, (c) an after school tutorial program, (d) whole language approach to instruction using a literature based series, (e) Writing to Read Lab for first graders, (f) supplemental professional staff, including a counselor, psychologist, attendance counselor, instructional coordinator.

Extended Year Schoolwide-A site: Brenda's Day

Summary of observations. At Extended Year Schoolwide–A, the intended curriculum includes a reduced teacher-student ratio in grades K-2, an extended year component which adds 19 days to the school year, an after-school tutorial program, whole language approach to instruction using a literature-based series, Writing to Read Lab for first graders, supplemental professional staff—including a counselor, psychologist, attendance counselor, and instructional coordinator—and supplemental para-professional staff and a home visit family education program. WSD students in site A received reading instruction within a reduced sized classroom. There is evidence of a "whole language" focus integrating reading, writing, social studies and art as shown in the excerpts of the WSD of Brenda.

> *Brenda* is a very small African-American girl, the smallest girl in her first grade class. She is pretty, neatly dressed in print slacks and a blouse. She wears her hair in one braid down her neck. She is very verbal and articulate, appears very curious and clearly enjoys what she is doing. Brenda was tested as a low achieving first grader and is in a combined first and second grade class in an urban extended year schoolwide project site.
>
> At the beginning of the day, the students are seated around three tables: all 10 first graders sit at the table in the front of the room, while two groups of second graders sit at two tables, one group with the aide and the group by itself. Later, the aide will do oral reading with one group, while the other group does capitalizations. However, this was an unusual day since the teacher was there only half the day. The children were spread among other second grade classrooms for the second half of the day.
>
> 8:15 Class officially starts. . . . Today is unusual because it is the first day of the Young Author's Fair and Mrs. E, the 1st-2nd grade teacher, is in charge of that event for the school.
>
> 8:32 Brenda arrives, a few minutes late, and takes her seat.
>
> 8:35 *The entire class walks to the library where the winning entries (1st, 2nd, 3rd, and honorable mention) from each grade are displayed on tables. The Young Author's Fair is designed to blend art, writing, and social studies. All children walk around the room, looking at the book covers. They aren't allowed to pick up the books to look at them.* All students return to class. Mrs. E. continues a lesson on capitalization for the second graders, asking: "What do you capitalize?" "Children raise their hands and then give answers in full sentences. Among the responses are: names of person, days of weeks, months, first letter in first word in sentences, the word "I" and titles. Brenda is listening and waiting with the other first graders at the front table.
>
> 9:00 An aide from another class arrives. The teacher stands aside to talk with her about the Young Author's Fair. The teacher asks a boy to come to the front of the room and mark off points for any table that makes noises while she is talking. Most children sit quietly, waiting.
>
> 9:08 *The teacher returns to the first grade class seated at the front table and begins with the reading lesson. The lower reading group is reading "One More Thing, Dad" a story that was begun the day before. Four boys are in the lower group, while the other six students (including Brenda) are in the upper group. Brenda has just been moved up to the upper group; this is her first day there. The teacher instructs the lower group to write about what Caleb (the young boy protagonist) is doing in the story. "Is he going to the park, playground, to visit friends? Tell me why he is going there. Work alone on this." The*

children then begin to write.

9:15 *Mrs. E. turns to the upper group and goes from one child to the next, asking them: 'Who did you read to at home?" She does not ask Brenda. . . . Each child reads aloud in turn going around the table, one page per child.* If a child has trouble with a word, other children are to help him/her out. Brenda calls out words when the girl next to her has trouble, including the words 'pond, almost, roast, breakfast.' The teacher says: 'Brenda is a good helper." Brenda then reads, in a strong voice, to which the teacher responds: "Very, very good, Brenda. Brenda reads all the words correctly except for one. The teacher then goes back through the children again, with each reading another page. Brenda pronounces all words correctly on this round.

9:30 *Mrs. E. says "Our duck was wise and smart. Why do you think the duck was wise? You are going to write it on this page. Tell me in your own words on big paper, and then illustrate your favorite part of the story." All first graders are now writing and illustrating.*

9:31 *Brenda: 'What does wise mean?" The teacher points to her head. Brenda stands up, standing by her chair to write. The teacher looks at what children are writing and says: "I think the duck was wise because.. That's the way to start." Brenda gets up* again and walks around the room, pushing in all chairs that are not flush with the table and then returns to her seat.

9:35 Brenda has written "I think..."

9:39 None of the children have written anything beyond 'because'. The teacher says: "Tell me why, what makes him wise? What did he do? Tell me what he did to outsmart the fox."

9:40 Brenda stands up again. The teacher says: "Boys and girls freeze. It's almost recess time. We will complete the assignment later."

9:45 Recess begins.

10:15 Class reconvenes. At 10:15 Brenda and another girl go the library to put the winning ribbons on the first grade books. . . . The teacher sets up the film projector. Today is film day.....

10:22 *Teacher: 'I chose this film, My Parrot Brewster, because we are doing a lot of extensive study on animals. What animal class is a parrot?" Class: "A bird and it talks to you'" Teacher: 'How many have seen a parrot?' A few hands go up. Class "A parrot is a medium sized bird." Teacher: 'There is a parrot in the Mall."*

10:27 Brenda returns just as the film begins.

10:50 Film ends and another film on seeds is to be shown except that the film misfeeds. Children see only the first few minutes of the film..

11:00 The aide leaves. Children are waiting while the films are put away.

11:10 Teacher reassigns children to the tables.

11:15 Brenda returns to her duck story. . . . Brenda again stands up and pushes chairs in around the room. She is soon distracted by the boy next to her who is doing math problems. (Once the writing is finished for the lower reading group, children were to do math problems). She talks to him, watches him, accuses him of cheating. Then she looks back at her paper. Over the next 10 minutes or so, she writes her responses.

11:28 *Brenda has written: "I think that the little duck was wise because she knew that the fox probably wanted her that's why she was wise."*

11:30 Teacher explains that she is not going to be here in the afternoon. She is taking invitations to the Young Author's Fair to other schools. She asks the children which teachers they want to go to. Brenda is to go to Mrs. C's room (a second grade teacher). The teacher instructs the students to take their assignments if they haven't completed them, because she doesn't know if she will be back.

11:45 Break for lunch

12:35 Brenda goes into Mrs. C's class. They are doing fractions (which Mrs. D's class has not done yet). This is a second grade bilingual class, with a five-hour a day aide. On the board is written: "CTBS math objective: Identifying fractions." The teacher explains to Mrs. D's students about her rules: 'I give points for following directions and completing work. If I don't have your attention, then I write up the time (until I do). Then you stay during recess or after school for me for the amount of time you weren't paying attention." Brenda watches the teacher and appears attentive. The teacher then discusses a fraction problem. A circle is divided into five parts....

12:52 Brenda is looking out the window. She doesn't appear to be paying much attention to the discussion of fractions.

1:00 While her own students work on fraction exercises in their math workbook, the teacher takes Mrs. D's children to the back of the room and shows them her "magic circle." She asks them to make a square, rectangle and triangle from construction paper circles. Brenda folds her circle into a hat. She says she will cut off the curved part at the end to make a triangle. The teacher asks her what she would do if she couldn't cut it, so she folds it into a triangle. The teacher asks if they can find the square. Brenda says yes and unfolds her triangle into a square; she is the first student to do it. They then do the rectangles. The teacher then tells them: "You've got your CTBS shapes now."

1:15 The children line up for physical education.

1:20 Exercises are relay races with special instructions (e.g., rubbing stomachs, hopping, skipping, tapping your head). Brenda is a full participant and well coordinated. She follows all the instructions. She is quick to pick up on the directions, and does much better than many of the second graders.

2:17 Return from exercise. Math text books are collected, coats passed out, and the teacher plays her guitar and does a sing along about living in (the City). Brenda listens and watches the sing-along.

2:25 Brenda and her classmates return to Mrs. D' s class (she's back) to pick up their reading books (a story of their choice).

Extended Year Schoolwide-B: Denise's Day

Summary of observations. In the schoolwide intervention as experienced by first graders at Extended Year Schoolwide-B, first grade students are in reduced size classrooms of 22, para-professional staff are providing assistance, the students attend Writing to Read, and they receive supplemental services; e.g., speech therapy. These components are highlighted in the whole school day of Denise, a student at the Extended Year Schoolwide-B site. A core literature approach was used at this site that is, all teachers at a grade level use the same series and are sequencing their instruction to the series. The instruction is also linked to mileposts, objectives, or district tests.

> *Denise* is an African-American first grader in an extended year schoolwide project urban school in a major metropolitan city. She is slightly built and as tall as the other first graders in her class. She wears her hair in three braids (one on each side of her face and one down the back). Today she is wearing a yellow shirt and jeans with print sneakers. The sneakers are on the wrong feet. She scored at the 30th percentile in reading and the 4th percentile in math on the CTBS. The classroom has 18 students in it, sitting at four tables. Each table has about six children at it, with one table having only one boy who is very active and draws on everything in sight. Denise sits at a table to the left of the teacher.

8:15 Students start filing into the classroom from the playground. They put their homework assignments in a box, hang up their clothes and find their seats.

8:27 Roll call. Denise is not present. The class starts with the Pledge of Allegiance and going through what day it is.

8:32 Denise arrives, and takes her seat. The teacher then hands out the folders for the Writing to Read lab, making sure all students know what stations they are to go to in the lab....

8:35 *The class walks to the computer lab, which is housed in another building on campus. They will be in the Writing to Read lab until 9:25. The teacher, the aide and a computer aide are all in the lab with 22 children. (Eighteen children are from the regular classroom.*

8:45 Denise is sitting at the writing table. She writes her name and throws the paper away. With a new piece of paper she writes a few words, then talks to the girl sitting next to her. With her head resting on her hand, she writes a few more words. The neighbor girl reads it. A boy (Earl) at their table is trying to write 'store.' Denise says to him: "s-t-o.." The aide stops her, saying 'Excuse me. I'm talking to Earl." *A few minutes later, the aide stops to look at what Denise has written, and tells her: 'You can write better than that. Read that for me.' Denise reads it very softly. The aide responds: "That's okay. Try to make the rest so we all can read it."*

8:54 *The teacher stops by Denise's chair and reads her story. She has inverted "it", writing "ti." The teacher asks: "What's 'it'?" saying 'it' very slowly. "Is it 'it' or 'ti'?" Denise responds: "it." Teacher then says, "Okay, let's change it." The teacher moves to another station. Denise is engaged, smiling, animated, exchanging looks with the neighbor girl. She writes a couple more lines. The teacher then calls to Denise from another table and tells her: "Why don't you read your story to [our visitor]?" Denise walks over to my chair, and very quietly reads her story to me:*

> "'The Toy Car.' The toy car can play. I like my toy car. I can play with it. My toy car can see me. I like toy car. My toy car love me. The car toy can see. The car toy is pretty. The car toy see a pig. My car toy is yellow and blue. The car toy is a car." I ask her what she does next. She says she would draw a picture, so I ask her to show me. Denise then draws a picture of a house with trees and grass, just like the picture from class yesterday. There is no car in the picture.

9:15 Denise gets up from her writing table, and selects pink and yellow construction paper as the cover for her book on the toy car.

9:18 *The aide asks her: "Denise, did you write your story over?" Denise says no. The aide asks: "Did Mrs. B. say you didn't have to?" Denise nods. The aide says: "Okay. Do you want to listen to the tape* "(audio tapes of books that children listen to while following the text)? Denise nods and skips to the listening center at the other side of the room.

9:18 Denise sits at the listening center, until the teacher turns off the tape and has the children line up to go back to their classroom.

9:30 Students are back in class. The teacher walks around stapling the stories between the colored covers. It is a well-organized routine. Mrs. B says to Denise as she staples her book: *"You're doing a good job. Didn't Mrs. B. say you did a good job?"* Denise shakes her head and looks at me....

9:35 Students take turns reading their finished stories to the rest of the class. Each child reads her/his story. The teacher occasionally calms students down ('We have two students who are being disrespectful'), makes a comment correcting a plural, and encourages a child to talk more loudly. Denise listens; she does not read her story out loud.

9:45 The class stands and does stretching exercises—hands over their head and then down at their sides. At each point (up and down) they chant numbers: 10-20-30 to a 100; then 5-10-15 to a 100. All of the kids clap and all of them (save one girl) lose it entirely on the number counting. This is the transition to math class.

9:50 The teacher reviews a lesson, clocks and telling time, first asking children what kind of clocks they have at home. Denise raises her hand when the teacher asks about kitchen clocks and again with grandfather clock. The teacher then hands out a worksheet on writing down what time it is from the position of the hands on a clock face. Denise is sitting quietly, draws in the lines for 9:00, the example given. *The teacher walks around and checks on what students are doing....*

10:07 The children have two faces left to do, which the teacher instructs them to do at home. With lots of touching between the teacher and students, they line up for recess.

10:10-10:30 Recess

10:35 *Denise leaves class to go to speech therapy. She is working on her "err" sounds. There are usually two children with the speech teacher. They work on words like star, door, hair, hear, tear. Denise is very animated and laughs. She tries everything. The teacher rolls a die. Each child repeats their word for the number on the die, and then makes up a sentence with the word: bear—I have a bear. Chair—I can sit on a chair. They get to put stickers by their names for being there and doing well. Denise chooses the heart over the clown, and goes back to class.*

10:55 Mrs. B is reading a story to all children, saying, "You have heard this story before, 'Petunia The Goose'." Helpers, including Denise, hand out copies of the book to the other children at their table. They are now going to do oral reading. The children read in unison, including Denise (or at least she mouths the words). The aide says to *Denise: "Good, you're keeping up."* To keep the children reading out loud, the teacher says: "I need help" and students begin to read more loudly. Denise keeps at it all the way through, although there are others who do not.

11:25 The story is finished. There is no discussion of the story. Instead the teacher begin to discuss compound words, putting two words together. Denise is not looking at the teacher as she goes over the compound words in the story (firecracker, something, understand). Denise is playing with her box of pencils; most kids are fidgeting.

11:29 The teacher instructs everyone to stand up to learn a new song. ....

11:35 The teacher says: "I'd like to teach you something you can do with your spelling words that is a lot of fun. You've never done this before, but it's a lot of fun. She then moves all children to the back of the room where they sit on the rug. The teacher then does a lesson on alphabetizing spelling words, saying "do we have an 'a' word? a 'b' word, etc." Denise is engaged, watching, but only says one word out loud.

11:55 The teacher says, " Now I have something really special." She goes into her office (a separated part of the room) and sprays cologne into the air in different places. She then asks the students if they smell it. She then starts a science lesson on air. Air is everywhere. How many have flown a kite in the air? The wind is fast moving air. She blows up a balloon. See how air fills the space. The teacher hands out balloons to each student.

12:30-1:15 Lunch.

1:40 *Class is again sitting on the rug, and in the midst of reading a poem: "You've got a right to the tree of life," by Dr. Gerold W. Deas. This is part of a program of oral presentations. The kids go on from here to read in front of other classes. Denise raises her hand to read the poem, but is not among those called on. Denise changed her shoes at lunch; they are now on the right feet. The children then begin reading their stories from the day before on spring, and the teacher shows their pictures to the class. The children ooh and ahh over the pictures....* Denise is sitting in the front row, moving around a lot but engaged. The children appear to really enjoy reading. *Denise stands up to read her story, but is interrupted.* The teacher says: 'Wait a minute sweetheart.' Denise then read, and loudly enough for me to hear.

1:55 The class goes outside for physical education...

2:18 Everyone returns to class and the teacher gets their homework ready.

2:30 Class is dismissed.

Instructional time at Extended Year Schoolwide-A and -B

The school day at Extended Year Schoolwide-A (a first grade site) is five hours and 10 minutes (310 minutes) long. One student's teacher was out for half a day, and as a result, the day's schedule was unusual. This student spent 75 minutes doing seatwork in another teacher's class, and only a fraction of the time in reading/language arts that she would have, had her regular teacher been present; nor did she have math that day. The other two students spent the bulk of the morning hours in reading/language arts including 45 minutes at a Writing to Read computer session, and both of these students did have math. Two of the three students shadowed had some science instruction, a different two attended a special "Young Authors" book fair, and none had computer or social studies. All three students had an elective—one had two electives—and their days included some non-instructional time (the mean was 16 percent of the whole day).

The school day at Extended Year Schoolwide-B (a first grade site) is 5 hours and 10 minutes (310) long. One student's teacher was a new long-term substitute, who was in her second day of replacing the child's original teacher. A second child arrived 45 minutes late. Two students spent part of their reading/language arts time in the Writing-to-Read lab, all three had math, and two had science and no social studies. The child who did not have science had social studies. None had computers. The three students' mean proportion of non-instructional time was 24 percent, due to one student's late arrival and to the new substitute's unfamiliarity with her class, which affected her management of transitions between subjects.

Urban schoolwide projects

As described in Chapter Two, schoolwide projects in a major urban system target the management and organization of resources at the local school site. Heavy emphasis is placed on site-based management, which includes control over the Chapter 1 budget. Components which are designed to influence the classroom instruction students receive include (a) reduced teacher-student ratio during reading and math instruction, with emphasis on in-class instruction, (b) program support teacher who teaches 90 minutes a day and also provides direct assistance to teachers, (c) elementary math resource teacher and a language arts specialist, (d) para-professionals in the classroom, (e) school-community coordinator to monitor attendance, (f) emphasis on whole language, and (g) use of "effective instruction" framework based on Madeline Hunter model (steps include: state objective of lesson, review, apply to student's past experience, provide instruction, give guided practice, etc.).

Urban site Schoolwide-A: Bernadette's Day

Summary of observations. For WSD students in Urban Schoolwide-A, instruction in math, reading and language arts is delivered to small groups of students within the regular classroom by specialist teachers. In addition to the regular teachers, para-professionals are in the classroom. In general, teachers stated the objectives of lessons prior to teaching and provided review and practice for students, but did not necessarily relate instruction to students' prior knowledge or background. Although the intended focus is "whole language," teachers provided instruction in skills in preparing students for standardized tests.

> *Bernadette* (BE) is a third grade student in a schoolwide project in a large urban school. She repeated the second grade so she is slightly larger than the other children in her class. Her teacher describes her as a hard worker who completes her homework and participates in class. According to the teacher, she is doing about the same this year across all subjects, except reading. The school emphasis is on whole language; however Ms. K. indicated that BE's weakest areas are in comprehension and phonics. In this observation, the teacher began the instruction with a lesson in phonics. BE is in a class with 21 other students.
>
> 8:52 The children enter the room and give *their homework books to Ms. X, the classroom aide.* Ms. K takes attendance. The children are loud and noisy. The room is arranged so that the students' desks are placed together in groups of four.
>
> 8:56 *Phonics. Ms. K reviews what has been written on the board—Syllabication Rule #9: "When two vowels come together in a word and are sounded separately, divide the word between the two vowels— -giant giant gi-ant."*
>
> *Ms. K asks the class to recite the other rules and as the students state the rules, she writes them on the board.*
>
> BE doesn't volunteer to state any rules but sits quietly and listens to the discussion. About ten minutes into the lesson the Principal comes on the loudspeaker and the students say the "Pledge of Allegiance" and listen to the announcements. Ms. K. reviews Rule #9 and instructs the students to complete a workbook page (dividing words into syllables). BE settles down to do her work but most of her classmates begin to talk, get up from their chairs, and find other diversions. Ms. K spends her time disciplining those making the most noise.
>
> 9:25 Six student's names was written on the board for disruptive behavior. When the students finish the assignment, they take turns sounding out the words that they had divided into syllables. *BE volunteers to sound out "radiator" but does it incorrectly. BE remains very engaged in the lesson, volunteering several more times and being called upon to sound out one more word ("create") which she does correctly.* Several of her classmates continue to talk and disturb others.
>
> 9:37 A seventh name is added to the board.
>
> 9:38 Reading. Ms. K reviews several reading skills to help the students for the upcoming district (standardized testing) program: 1) how to identify clue words, 2) survey, and 3) locating information. BE is active in the discussion and volunteers to answer one of the questions asked by Ms. K. "Inferencing" is the final concept reviewed by Ms. K. Following the discussion she assigns the students to complete a workbook page to *practice* what they have reviewed. The students take a while to settle down and open their workbooks. Instead they take the opportunity to talk, get out of their chairs, throw pencils, slam books, and be generally disruptive. Although BE is slow to open her workbook, once she gets started she does her work quietly.
>
> 10:25 There are nine names on the board and the students have moved into a period of 'silent reading.' This period marks the first time that the class has been quiet all morning.
>
> 10:30 Recess.

10:52 Math. Ms. K writes on the board: "Math—money, writing amount; counting change." She begins the session with some addition and subtraction problems that the class does together on the front board.

10:54 *Ms. A, the Schoolwide Projects Math Resource teacher, arrives and begins to work with seven children (including BE) at the back of the room while Ms. K. continues her lesson. In Ms. A's lesson, the students practice counting by 5's, 10's, and 25's. Next Ms. A writes the day's goal on the board: "Goal: Today we will learn money. You will know that you understand if you get 8 out of 10 correct." She reviews the amounts in pennies, nickels, dimes, quarters, and half dollars, and draws circles on the board with the amounts in the middle to represent the coins. The students take turns counting the number of coins and the total of each row that Ms. A has drawn. BE does not volunteer to count. Ms. A then draws rows of coins of differing amounts and the students count the total amount of each row.*

Ms. A brings out play money and gives a bag of plastic coins to each student in the group. The students are asked to identify each coin as Ms. A states the amount. Next she writes different amounts on the board (38, 75, 55) and instructs the students to use combinations of their coins to form the correct amount of each example on the board. BE follows along with the rest of the group in combining her coins. At 11:30, Ms. A reviews what the group has learned during the lesson and leaves the class. The group joins the rest of the class as Ms. K. is finishing her math lesson.

11:33 The children are instructed to copy their homework assignment from the board.

11:45 Lunch

12:15 Science. The students come directly from lunch into Ms. K's classroom/lab for science. *The goal is written on the board, "1) Understand populations and habitats, 2) Be able to describe how ants live — Describe an ant city, tell about each ant's job and how they live.* "Ms. K reviews with the class how they will spend the session discussing habitats and looking at an ant farm and accompanying ant book. She reminds the students how she had put together the ant farm several weeks ago according to the instructions. Next, Ms. K reads from Ant City, the book describing ant farms, and walks around the rooms showing the children the accompanying pictures. BE and her classmates are attentive to Ms. K and very interested in the pictures as well as in the ant farm which Ms. K also brings around the room. With ten minutes left to the class, Ms. K passes out paper and pencils and gives the students an assignment *to draw an ant farm.* Before settling down to work, the students become very loud and noisy, talking, hitting each other, getting up from their chairs, etc. Ms. K tries turning the lights on and off (a tactic Ms. K. had also tried to get their attention).

12:55 Ms. K turns the lights on and off again in response to the noise level and then collects the papers and pencils as the class ends and Ms. K. comes to escort the students back to their classroom.

1:07 Social Studies. As Ms. K begins reviewing facts about Washington, D. C., *Ms. H (Language/Arts Specialist) arrives and gathers a small group of students (BE included) at the back of the room for a Language Arts lesson. She writes the goal on the board, "Today you will read and discuss 'Three Up a Tree'." Next, she passes out story books and assigns different parts to a few of the students so they can read the lines of the characters in the story.* The students read silently, answer a few questions and then take turns reading their parts in the story. BE is not assigned a part so she sits next to Ms. G and they share a book while the students read. *Occasionally Ms. H stops, and asks the students if they know the meaning of certain words in the story (i.e., clever, "Can you tell me when you were clever?").* Before the group ends the lesson, Ms. G asks BE to read a few lines on the board from a previous story.

1:35 Creative Writing. Ms. K reviews the "haiku" and explains how to write one (3 lines, 5-5-7 syllables in each). The class works together to write a haiku on the board.

1:45 Recess

2:08 Creative Writing (continued). Students are told to pass their homework books to Ms. K, and they spend the remainder of the class writing a haiku. Everyone works on their haiku and this writer and the aide are asked to read their haiku out loud when the class ends.

2:45 Class dismissed.

Urban site Schoolwide-B: Dwayne's Day

Summary of observations. The program components at Schoolwide-B are similar to Schoolwide-A. They include a reduced teacher student ratio during reading and math instruction with emphasis on in-class instruction, program support teacher who teaches 90 minutes a day and also provides direct assistance to teachers, an elementary math resource teacher, para-professionals in the classroom, school-community coordinator to monitor attendance and extensive community outreach, an emphasis on whole language, use of "effective instruction" framework based on Madeline Hunter model (steps include: state objective of lesson, review, apply to student's past experience, provide instruction, give guided practice, etc.), and an extended school year program of 22 days.

The curriculum as received and experienced by students included an emphasis on whole language, school activities encouraging parental support, paraprofessional service in the classroom, a focus on the classroom teacher as the primary source of providing instruction to Chapter 1 eligible students, continuing the academic instruction students receive for an additional 22 days in the summer.

> *Dwayne* is a third grade African-American male child of average build in an urban schoolwide project located in an extremely impoverished, high poverty area. He is in a classroom with 25 other students in an urban schoolwide project site in the same district as site A. He was retained in first grade at another school. His CTBS scores were: 10th National Percentile in Reading, 1st National Percentile in Math, and 10th National Percentile in Word Analysis.
>
> Mrs. U., Dwayne's teacher, is ending a six-week lesson integrating science, math and reading on trees, plants. The culminating activity was actually planting small trees which the teacher had purchased for each child in her class from McDonalds. The class was outside engaged in actually planting the trees. Dwayne wanted to know when and how to apply the plant food. His teacher replied that he had to follow the directions on the plant food envelope. Dwayne picked up the package and read the directions aloud flawlessly and without errors to figure out what to do, capturing the attention of the observer.

8:45 Dwayne arrives in the classroom, begins talking with friends. The teacher calls for Pledge of Allegiance; Dwayne participates and then sits quietly at desk.

9:00 Dwayne goes to gym.

9:45 Dwayne returns to class, and goes to seat to prepare for reading. *His mother comes into the classroom. According to the teacher, Dwayne's mother comes in frequently and helps out with the students. The mother is also friendly with the aide who works in the classroom. The teacher views Dwayne's mother as one of the more cooperative and friendly parents.* This is evidenced by the conversations between the two of them. The teacher remarks, "Dwayne invited everyone to your house for his birthday party last night. He wrote his address on the board." The mother laughs and says everybody was welcome and they did have a small party. She remarks to the teacher how Dwayne comes home everyday and talks about the teacher, what she said, what she was wearing, how much he liked her etc. Dwayne appears pleased to see his mother and chimes in on the conversation to tell the class about his presents.

9:55 Dwayne is included *as one of 14 students* in a semi-circle on floor in front of class; however, Dwayne is somewhat out of the circle. The teacher asks him to be the narrator in play they are to read. He shouts "I don't want to be no narrator." His mother, working in the back of the room with another student, hears and says "You got a problem?" Dwayne starts to read. As other children read, Dwayne corrects them. They continue reading the play *What He Deserves*, Act 1, which is about a King and Queen. The *stated objective* is on comprehension. The teacher asks "What's a King and Queen? Roland, a large boy in the back with a speech defect raises his hand. The teacher says, "Roland, give me an example. What does he do?" Roland shouts out, "He in charge. . .rule the land." The teacher replies "good," and continues discussion of the various characters assigning students various parts. Students begin talking, she interrupts and says "In order to read the play, you have to listen." Cherita begins to cry. The teacher asks "What's the matter?" The girl replies "I can't see." The teacher says, "Cherita, take your glasses out of your desk and put them on." She says, "I can't, I left them home." "OK," says the teacher, "return to your desk." The girl goes to her desk and quietly sobs.

10:15 Joey, another student, is asked to read his part. He begins "How good it is to be in peace again...." He loses his place. *The teacher walks over with a piece of paper and aligns it under the text.* He begins again. However, Roland threatens another student and tells him to shut up. The teacher says, "Roland, go back to your seat." During the commotion, Dwayne is still attentive, fiddling with his pencil, and glancing at his mother, who is in the back of the room helping another student.

10:30 Teacher calls "Narrator" to get Kareem's attention Dwayne and Joey are talking. Teacher taps Dwayne on head and stays "Stop." Dwayne replies, "He keeps talking to me." Dwayne begins to read and gets to the word "approaches." He says" don't tell me what it is." He figures it out by himself. *As students encounter various words they do not know, the teacher writes them on the board and does a mini-discussion. (e.g., crops, approaches).* The teacher asks students who has been following what happened and what will happen? Dwayne replies with correct answer. *The teacher asks students to return to their seats and complete a writing assignment concerning what happened and what will happen.* She writes on the board:

1) What made the farmer think his turnip was a good present for the king and queen?
2) What was the farmer's reward?
3) Why did the farmer receive his reward? What is the rich brother planning to do now?

10:35 Dwayne goes to back of room and sits next to his mother to work on assignment. He has difficulty and first asks his teacher, then his mother. His mother says "they want you to think." He continues to work but moves to the front of the room.

10:55 Dwayne passes in his paper and comes back to his mother to see what she is doing, and returns to his seat, stopping and talking to his friends. He stops at the teachers' desk to get another sheet of paper to complete his second assignment, which is to *draw and list the steps to planting a tree.* He returns to his seat.

11:14 The teacher tells students to put away writing to work on math. Dwayne puts his paper away, turns to his neighbor and starts talking about his birthday party. The teacher prepares for math activity. It is a timed multiplication drill. The teacher says "pencil up," Dwayne is still talking. Teacher hears him and call his name. He stops.

11:22 Drill begins. Dwayne begins and pulls out scrap paper to figure his answers.

11:32 Dwayne is finished. Teacher checks, 100 percent correct. Teacher gives him another ditto. He continues to work.

11:37 Teacher calls time. Dwayne is still working on his second sheet.

11:42 Teacher ask Dwayne to take a note to the office. Joey is being disruptive.

11:46 Dwayne returns. The teacher demonstrates a problem on the board. Problem reads: Sam's mother gave him 1 cookie on Monday, two cookies on Tuesday, four cookies on Wednesday, eight cookies on Thursday. If the pattern continues, how many cookies will he get on Friday? She asks for a response. Dwayne raises his hand and answers correctly. The teacher hands out sheet. Dwayne works until lunch.

12:00 Lunch

12:45 Dwayne returns with his friends. Teacher passes out map that students have been working on and explains they are to fill in specific areas on the map with various colors. She has a meeting to attend and the auxiliary substitute comes in. Dwayne begins working on his map, but his friend asks him questions. He continues to work.

1:10 Dwayne is up and out of his chair on the other side of the room and talking with his friends. Other students have begun to move around talking. Utter chaos ensues with the auxiliary substitute unable to control the class through her screams and threats.

1:15 Dwayne is at his desk drawing a car; other students are milling about.

2:00 The teacher returns and immediately writes names on the board for detention. Dwayne is not included. She begins discussion of Weekly Reader story. Passes out and asks each child to read a paragraph. She begins with Craig. Roland raises his hand, reads very slowly, and stumbles over words. Dwayne is paying attention but fiddling with pencil.

2:20 Dwayne leans over talking to his friends. He is up walking around the room oblivious to the teacher. The teacher asks him why he is walking around the room. He replies "I'm looking for my pencil." He continues this behavior, disrupting other students until it is time to go home. The teacher reprimands and writes his name on the board for detention. Dwayne is moody and sullen.

2:45 School dismissed.

During the extended year program, students continue to receive instruction in reading and math from their regular classroom teachers in key academic subjects. The summer period allows students additional time in learning academic subjects as well as time for teachers to review progress of individual students. Dwayne was observed during the extended year in a class that consisted of nine students, the regular classroom teacher during the school year, and a paraprofessional. The previous day, Dwayne had been reprimanded for harassing a female classmate after school. During this observation, he is quite uninvolved in the lesson. His teacher indicates that he is capable and usually does his work, in spite of his temper and behavior; however, the teacher notes that his performance is inconsistent.

Extended Year Schoolwide-B—Dwayne's Day

9:00 English—Ms. U. has written the class objectives on the board. They will work on making sentences using contractions. This is a review. She tells the class they will each get to make a sentence using the words such as can't/cannot, shouldn't/should not, and tell the class what the apostrophe stands for.

9:15 Ms. U. is at the board writing contractions, asking students to pronounce them and make sentences. Dwayne is not one of the students (actively involved).

9:30 Students work individually at their seats using worksheets while Mrs. U is at the board writing contractions and asking students to name them. While most of the students are working and answering questions, Dwayne seems distant and uninvolved. He plays with bits of paper underneath his desk. Ms. U. says nothing to him, and he does not raise his hand to say anything. Throughout the entire class, Dwayne has nothing to say and is not involved.

9:45 Computer Lab. Ms. K., Ms. U., and the para-professional are present. Students eagerly come to the class and take their seats. Most students are able to get a computer of their own. Dwayne immediately goes to a computer and presses keys to begin work. He starts by playing a game as Ms. K. passes out a worksheet. Ms. U. and the aide help one or two students to begin.

9:55 Several students are observed working at different levels ranging from multiplication, long division, and word problems. Other students work at programming and problem solving Dwayne completes his worksheet and goes back to playing games, stopping at times to talk and play. When told by Ms. K. to stop "fooling around" he does so and goes back to work.

10:02 Most students are on task and need little help from teachers or aide. Dwayne gets up a few times to see what a couple of his classmates are doing at their computers, showing one classmate which key to use to answer a question. Soon goes back to his computer.

10:15 Dwayne does not notice that Ms. K leaves the room as he works attentively at his computer. Aide and classroom teacher look at *students' folders and discuss what several students have completed during regular school year. Ms. K returns and the three of them talk about which students need review and which ones can move to* another level with the computer. While Ms. K. and Mrs. U. talk, *the aide is monitoring and keeping students on task,* saying such things as "What does F10 mean, and how do you multiply these numbers."

10:25 Ms. K works with students who are involved in programming and problem solving. Mrs. U and the aide work with other students in review of multiplication, fractions, and division using the computer. *Dwayne continues to do exercises (multiplication)* at the computer. Ms. K. calls the class's attention to some word problems she has written on the board. Dwayne is not paying attention. When she calls for his attention he stops and listens for instruction. When told "use the mouse to get the answer. . .you can work it out," Dwayne answers along with several others. "Good work," adds Ms. K. "Now let's close up."..

10:34 Project SEED Math Instruction (SEED teacher, Ms. B, Ms. U., para-professional, visiting parent and another teacher present in the room). Dwayne enters the room, sits at a desk, and stays there for a few minutes. While Ms. B is putting name cards on students' desks, Dwayne moves quickly from his seat to another on the other side of the room. No one says anything, as he begins talking to a classmate.

10:38 SEED teacher enters and greets students by name. Ms. B. notices Dwayne is not in place, and tells him to return to his seat. Class begins and the SEED teacher writes an equation on the board asking students for response. Noticing that some students are not responding, the instructor prompts non-participating students to become involved by saying "Would you please pick someone to read the numbers on the board for us?" This strategy works well. Students are also asked direct questions such as "What is 12 times 12?" If the student cannot answer, the instructor asks, "How about asking someone to help you with that?"

10:48 Dwayne does not seem interested in what is going on in the class. He has moved again, and the classroom teacher takes him to the back of the room saying, "Dwayne, you know I will not tolerate this kind of behavior. You will either sit down and behave or leave the room. What would you like to do?" Lowering his head, Dwayne answers, "Sit down." Ms. B answers, "All right, then sit down."

10:55 Dwayne is behaving better, but still seems sullen.

11:00 The SEED instructor is writing equations on the board and students are responding. When the class gets excited and involved, Dwayne seems to be a bit more motivated. He listens and raises his hand. When asked to read from the board, he reads the number 10,769 and uses it in an equation. "Good job Dwayne, pick someone to give us another equation," says the instructor. Dwayne picks another student and settles back proudly in his seat.

11:15 Dwayne leaves for gym class.

12:00 Lunch

1:00 pm Classes dismissed early. Building too hot.

Instructional time at urban sites Schoolwide-A and -B

The urban site Schoolwide-A school day (third grade) is 300 minutes (five hours) long. Both students observed had reading/language arts, including a lesson taught by an in-class reading resource teacher. Both students had math taught by an in-class math specialist; in one class, the entire class participated, while in the other, the regular classroom teacher simultaneously taught math to the rest of the class. Both students had science as well, and neither had social studies, computers, or electives. The mean proportion of non-instructional time was 20 percent.

The urban project site Schoolwide-B's school day (third grade) is also 300 minutes (five hours) long. One student arrived 30 minutes late, and another had a substitute for 75 minutes. All three students had reading/language arts, and all three had math—including one who had an in-class resource teacher provide the lesson. One had science and a small amount of seatwork, another had computers and two had an elective. The mean proportion of non-instructional time was 24 percent, due primarily to the substitute's difficulty in classroom management.

Rural schoolwide components

As described in Chapter Two, the major components of schoolwide projects in rural site Schoolwide-C include (a) an elimination of pullout programs, (b) reduced student-teacher ratios to 17:1 and 14:1 in primary grades, (c) all K–1 classes receive at least half-time para-professionals, (d) computer assisted instruction, (e) whole language reading instruction, (f) use of learning centers, (g) use of math manipulatives, and (h) use of cooperative learning.

Rural site Schoolwide-C—Danielle's Day

Summary of observations. As seen at rural Schoolwide-C, the reduced student-teacher ratio, cooperative learning, and use of manipulatives were experienced by students in the sites. The frequent interactions and monitoring provides an enriched student experience for Danielle.

Danielle is a nine-year-old third grader in Ms.'s class, a class of sixteen students. Her language of origin is Keres, which is the native language for the Pueblo people. Danielle scored in the 1st Q on the CTBS-4 reading exam and at the lower end of the 2nd Q on the math exam.

8:20 Breakfast

8:48 Transition to classroom.

8:50 *Math instruction begins. Students sort and count math manipulatives at the teacher's instruction. Students are in five groups of four.* Danielle's group is the Koalas. For this exercise Danielle is the group recorder—ready to work with pencil and paper. The students have done this work before, are motivated, focused on the task, and know what to do. Ms. O. uses her incentive system to get students moving. The first group ready to work (with all materials on desk) receives points. When a certain number of points are accumulated, those groups get a special reward (party on a Friday, outing, etc.). Groups race to be ready.

The teacher distributes *manipulative map boards and asks everyone to read the number "489" which she has written on the board. Danielle records the number on her paper. Two other group members, Robert and Michael, immediately begin to create the number with the manipulatives.* The teacher writes 4 89 divided by 4 on the board and re-teaches divisors; she checks to make sure everyone understands. She then instructs the class to divide their hundreds flats into 4 groups. Ms. O's tells the class that today she wants to be sure they master the recording part of the work.

Danielle records 489 minus 400 to illustrate what other group members are doing with the flats. The teacher asks: "How many in each group?" Class members respond, "Only one." Ms. O. tells students to divide out the tens sticks. She asks recorders: "How many tens sticks came off the board?" and tells them "Eight." Danielle records this, and copies the rest of the long division problem from the board where the teacher is working it through with the class..... Ms. O. puts another problem on the board (647 divided by 3), and tells the students to work this problem the same way she has done the example. *Ms. O. circulates among the groups, checking their work and answering questions.*

9:10 The teacher writes a new problem on the board and tells the class they need a review of fair trading because some students have forgotten exactly how to do it. Danielle watches her partner divide the manipulatives as the teacher instructs. Danielle does not respond to any of the teacher's questions, which are asked to elicit understanding of fair trading.

9:20 Ms. O. tells students to switch partners. It is now Danielle's turn to work with the manipulatives and Trini's turn to record. Ms. O. writes the new problem on the board: 344 divided by 2. Danielle immediately puts 3 hundreds flats, 4 tens sticks, and 4 ones units on her map board. She and her partner confer, speaking Keres. Danielle begins dividing the manipulatives. Ms. O. asks students not to work ahead. Trini helps Danielle, both speaking Keres, and they complete the problem together. Trini is much more assertive about the exercise—she knows what she's doing with long division and periodically points to the manipulatives and helps Danielle with her part of the task. Trini is also recording.

9:40 Ms. O. tells teams to work the new problems on the board on their own. Danielle counts out the appropriate combinations of flats, sticks, and units to represent the dividend.

9:41 Ms. O. reprimands students who are laughing, talking and walking around the room. If they don't get back to work the consequence will be detention.

9:43 Danielle and her partner begin the first problem. Trini tells Danielle what to do. Danielle divides manipulatives as Trini has shown her; Trini is recording. Then they switch roles without being told to do so. Both are focussed on the task. Trini (speaking Keres) again helps Danielle, this time with recording. Danielle is slower and more thoughtful whereas Trini knows just what to do and wants to move! After Danielle records the manipulation, Trini checks her work. Ms. O. has been circulating throughout the classroom, answering teams' questions and helping the pair of girls who have spent most of the lesson talking.

9:50 Danielle gives her team's paper to Ms. O and picks up the Tangrams packet as Ms. O. has instructed.

9:52 Danielle begins working on Tangrams. Trini observes and assists. Danielle is totally absorbed in her work.

9:57 Ms. O. asks the three groups which are finished with their math problems to sit quietly while she works with the team that still needs her help. Danielle has finished with her Tangram work; she talks softly to the other students in her group.

10:04 Exercise break. Ms. O. calls all students to the green rug in the corner for "Chicken Fat." Danielle and others finish cleaning up their desks and putting things away, then assemble in a circle on the rug, talking.

10:13 Transition to reading class.

10:14 Students break into groups for reading (without being told what to do). The routine in this classroom is very well established. Ms. O. works with a reading group. First one, then another student reads orally to her and the group from the textbook. *At the Listening Center, students* work on sentence construction. Another group of students work on reading worksheets at their desks. Danielle is part of the group on the green rug playing with puppets who only speak English.

10:37 Groups shift from one work area to another. *Danielle's group of four moves to the Listening Center.* The teacher has prepared color-coded envelopes with words which students use to construct sentences. Danielle picks up the envelope marked "Who" and begins to write in her notebook. Students in the group speak quietly in Keres. *Ms. O. rotates to Danielle's group to remind students to construct sentences with a subject and verb, capital and period. She asks Danielle what is in a sentence besides a subject.* Danielle doesn't answer and has a blank expression. One of her group mates responds "Object." Ms. O. says "Right" and leaves the group. The students return to building sentences. Everyone in the group is working at the task. They choose words from the envelopes marked "Who," "What," "Why," and "Where." They all are familiar with the exercise and know what to do. After making sentences, they read them to each other, laughing. For example: "The boy put the pickle in his hat." They make more sentences and giggle at each other's work. When one student can't find a word she wants, another helps her.

10:55 *Ms. O. moves from working with the reading group to check on Danielle's group. Ms. O. asks the group what color the verbs are. Danielle answers correctly, "pink," and smiles.* Danielle has written four sentences. Ms. O. looks at the group's work without comment.

11:00 Transition, clean up of area. Ms. O. collects the sentences constructed by Danielle's group and reads them. She asks the students to identify the verb in each sentence. Ms. O. praises two of the students' sentences. She offers Danielle no feedback, positive or negative.

11:10 *Danielle and her group now move to the Reading table. Ms. O. calls on a student to read aloud.* Danielle follows along, on task, listening. Next it is her turn to read. Ms. O. interjects with correct pronunciation of mispronounced words, comments on the story, and questions that relate their lives to various things in the story. Danielle reads well. Other students continue reading aloud in turn.

11:25 Danielle reads aloud again.

11:28 Transition to lunch.

11:30 Lunch. As students finish eating, they head for the playground with their friends.

11:45 Play on the playground.

12:10 Transition back to classroom.

12:12 (Usually at this time Ms. C., another third grade teacher, comes into Ms. O.'s class to teach social studies. Today, however, the schedule has been changed.)

12:15 Ms. O. calls the final reading group. Danielle gets colored paper and crayons from the *Young Authors* cart. She has completed her worksheets in the Reading workbook (categorizing, using syllables, practicing alphabetical order). Now she works on *making a book*, something that several of the third grade classes have been doing this spring.

12:35 Transition and clean up.

12:40 Science instruction begins. Ms. O. explains that today's lesson is on gases, solids, liquids, and non-Newtonian matter, which is somewhere between a liquid and solid, but neither.) She reviews the routine and class rules: while she is working with one group creating non- Newtonian matter with cornstarch and water, the other groups are to create posters entitled "States of Matter." Ms. O. asks the class about the difference between solids, liquids, and gases: "Which one has atoms that are packed tightly together?" She calls on a student who responds correctly. "Which is more dense?" "Which is less dense?" This is a review for students and several respond correctly. Danielle is off task, still working on her book project. Ms. O. tells the class to look through the magazines and cut out pictures of things that are solids, liquids, or gases for their posters. She reminds them to write the title at the top and to divide the poster board into three categories.

12:55 Most of the groups are working on the poster project. Danielle is working on both her poster and her book. Some students tell Ms. O. that it's hard to find pictures of gases — can they include clouds? *Ms. O. redirects Danielle to her science work, telling her to put her colors away for now.* Danielle looks through magazines, cuts out pictures of trucks, and pastes them on her group's poster under the word "Solids." She seems uninspired by this task and starts to daydream.

1:10 Now it is the Koalas turn to do the science experiment at the sink: non-Newtonian matter. Instant excitement. All of a sudden everyone in Danielle's group is on task. The previous group has mixed cornstarch and water to create a gooey white mass. Ms. O. illustrates how the matter changes consistency when held in your hand (exposed to heat) and when left to sit. The students get into it, literally and figuratively. They are eager to show me: "See how it changes! Now, hold it in your hand! Now try to crumble it! Let's see what it does if you put it all over your hands! It keeps changing!"

1:16 Ms. O. instructs the Koalas to clean up. They are reluctant to leave their gooey experiment.

1:22 Danielle and the other Koalas finish their poster. Students have included trucks and cars for solids, a picture of the ocean and a shot of whiskey for liquids, and a hot air balloon for gases. Danielle didn't pay much attention to this task — she participated minimally.

1:23 Danielle moves to another group, the Elks, and helps them work on their poster. She pastes pictures of three trucks which she has cut out.

1:25 Transition, clean up, management, wait time.

1:32 Kay, the school counselor arrives and takes over class. She distributes a mimeo, stating, "Alcohol and other drugs can make people think and act differently." The handout shows a woman smoking marijuana. The students fill in the blank describing how the woman is feeling. Danielle listens, spills her crayons on the floor, and takes her time picking them up. There is no discussion about this. Kay passes out a second handout, "Drinking and driving causes accidents." She asks the students "Why?" Danielle listens. Without comment the children color their handouts of the angry, sad, and confused people using drugs and drinking.

2:00 Transition, clean up of classroom, bathroom break.

2:10 Ms. O. tells the class that today they will work with the lame sticks. Excited students sit in a circle on the green rug, smiling and waiting. Ms. O. will not put the music on until the room is absolutely quiet. She waits. Absolute quiet. Ms. O. begins the tape. Smiles all around, the third graders, led by their teacher, move with the music through intricate patterns of tapping and quiet with their sticks.

2:25 Students line up for dismissal to recess.

2:45 School day ends.

Rural site Schoolwide-D: Maja's Day

Summary of observations. At Schoolwide-D, the rural site class size was reduced and paraprofessionals used the classroom. However, the delivered instruction to students did not reflect changes in the amount of teacher interaction, individualization and monitoring. In fact the size of the reading group numbered 19 students and the teacher read directly from the manual. The major components of the intended curriculum of the schoolwide intervention at rural site D were (a) reduced class size, (b) use of multi media in instruction, and (c) computer assisted instruction.

Maja is an eight-year-old African-American third grade girl in a class of nineteen students. She scored in the 2nd Q on the CTBS-4 reading exam and math exam. Her teacher, however, reported that she is one of the best students in the class and would probably not be in Chapter 1 if the school did not have a schoolwide project.

8:55 The teacher leads a large reading group of 19 students, of which Maja is one. Students sit in a circle at their desks. They read a paragraph from their reading textbooks when called on by Ms. N. At the completion of each paragraph, the teacher reads comprehension questions from the teacher manual, calling on students with raised hands. The questions require brief responses. Student replies are usually limited to a few words. As the students take turns reading, the teacher interrupts to correct words they mispronounce and to reprimand students who fidget in their seats. Students raise their hands eagerly to be called on to read. The teacher threatens students who have trouble concentrating (squirmers) with being put out of the reading group and/or with detention.

9:05 Maja sits in a corner with other girls in the 19-student reading group. The teacher leads the class in responding to questions at the end of the story. For example, "How was the fat mouse different from the jumping mouse?" The teacher continually interrupts the lesson to scold a student or students for looking at someone else's T-shirt, answering yes or no to a question in choral response, playing with pages of the book, or making physical movements. Maja volunteers to read/answer every question. The teacher does not call on her. The teacher asks what animal they'd like to become. Responses include "An eagle so I could get away," "A parrot so I could talk," "A lion to be strong," and "A horse so I can run like a wild thing." Maja keeps her hand raised but the teacher does not call on her.

9:20 The teacher explains the sequence of events: it's important to be able to put things in the proper order. While the teacher reads a series of events, Maja reads a poem in her textbook to herself. The teacher asks the class what happened first in a series of events she had read aloud to them. Four students give incorrect answers when called upon. The teacher responds "No" to each and calls upon a fifth student. The students do not seem to understand the exercise. Maja sits staring into space. She and a group of four other girls sit off to the side of the circle in their own little group. Most of the teacher's focus goes to boys seated nearest to her. The boys move around in their seats, make noises, easily gaining the teacher's attention.

9:22 All students return to their regular seats. The teacher leads the class in saying their spelling words loudly, repeating them after her in choral response, then repeating the words syllable-by syllable with claps for each syllable. Maja is actively engaged.

9:24 Students begin work on spelling worksheets (fill-in-the-blanks) in workbooks. The teacher instructs them not to look at each other's papers. When Maja completes her worksheet, she sits staring into space. While students are completing this task, the teacher prepares a slide for the microscope. The principal announces over the intercom that teachers are invited to the cafeteria for refreshments in honor of Teacher's Recognition Day.

9:36 The teacher leads students in reviewing a story comprehension worksheet. The teacher reads questions aloud from the worksheet. Students read their written answers as called upon. Maja is on task.

9:45 The teacher and I leave the classroom at the principal's request. *The teacher puts Maja in charge of the class* ("to take names"). She instructs the class to read the chapter entitled "Bones" in their science textbooks.

10:05 The teacher and I return to the classroom.

10:30 The teacher summarizes main points in the science chapter students have read. *The teacher calls on Maja to read a paragraph from the text out loud. The teacher elaborates on text with additional information from teacher's manual. Students listen. Maja is on task.*

10:40 The teacher instructs students to read the review questions in the science text. Maja is on task, listening, though she looks bored. The teacher reads directly from the teacher manual. A student asks a question related to the content of the lesson (very unusual occurrence): "How many bones are there in my hand?" The teacher states she doesn't know, and goes on reading from the manual. The students are involved (listening and responding) but didn't seem motivated or challenged. The teacher continually reprimands individual students, mostly boys, for moving around in their seats. Maja sits quietly, leafing through her science book, reading ahead, listening to the teacher and student responses. Boys get lots of attention from the teacher in this class. Some boys are in perpetual motion, inquisitive, and animated. Questions related to text reading require one word answers and lists. For example, the teacher reads the question, "What kinds of things do joints in your fingers let you do?" Students respond one at a time with brief or one-word answers. Maja is actively engaged in this.

10:45 The teacher tells students she has put a sample of her cheek cells on a slide; she will call on them to look at the slide one at a time. They are to keep their hands behind their backs, look quickly, and don't touch the microscope. If a student looks longer than 10 seconds, the teacher hurries him/her on. There is no discussion of the slide. Maja takes her turn viewing the cheek cell.

10:50 The teacher scolds the class because there is a pencil on the floor and some students are moving their desks and making noise while waiting to go to gym class. Maja sits quietly waiting.

10:55 Maja lines up with class to go to gym.

11:00 Gym class. It is raining so gym is held in an empty classroom. Two third grade classes are combined for gym.

11:30 Students work math problems.

12:00 Lunch

12:30 The teacher deals with an altercation between two boys. Other students waits, talking quietly. Maja talks with friends next to her.

12:40 Math. The class has been working on tenths. The teacher reads math problems from the text. Students make a choral response and write answers.

12:50 Spelling. Students chorus words after the teacher says them. Maja is on task. The teacher reads the vocabulary exercise from the textbook. *She calls on Maja, who answers incorrectly.* (The question is "what is the opposite of highest" and Maja says "higher" as her choice from the list.) The teacher responds with "No" and calls on another student. Most students respond incorrectly during this session on opposites. The teacher does not present a lesson. The teacher then reads spelling words and tells the students to say the base word. For example, "longer, long." Maja is on task.

1:00 English lesson: Object Pronouns. The teacher reads from text. The class reads guided practice questions. The teacher calls on students to answer. Maja looks bored. She tracks what is going on while doodling, stretching, yawning, pulling her eyelashes and gazing out the window.

1:12 The teacher reads "summing up" section from the English textbook. The teacher focuses on a group of nine boys and one girl whose desks are in the center of the classroom. Students scattered around the fringe of this group get called on less and receive less academic/behavioral feedback. This includes Maja. As the pronouns lesson continues, *every so often Maja raises her hand and responds to a question from the text.* The teacher instructs students to read the next exercise in the text and write answers. Maja is on task. At least every two minutes throughout this lesson, the teacher scolds a student (for whispering, sitting on their feet, looking out the window). At this point, Maja has received no academic feedback all day.

1:30 Cursive handwriting lesson. The teacher writes a sentence on the board in cursive for students to copy. Maja is on task.

1:45 Social Studies class. The teacher reads from the textbook a chapter on "Elections". The teacher sets up a mock election. The students instantly go from bored and passive to alert and active. The teacher tells them to nominate people of their choice. (It is never clear what office they are nominating these people for.) Students nominate Janet Jackson, MC Hammer, Michael Jordan, etc. They are excited, leaping out of their seats, calling out names. Students vote by secret ballot. Some try to influence their neighbors or tell each other who they want to win and why; the teacher reprimands them: "Who you vote for is supposed to be secret in a democracy. You don't tell anyone who you vote for!" After the teacher counts the votes and announces MC Hammer the winner, the students are ecstatic—everyone is smiling for the first time that day.

2:05 Art. Students work in clay.

2:30 End of school day.

Instructional time at rural sites Schoolwide-C and -D

The rural Schoolwide-C school day (third grade) is 315 minutes (five hours and 15 minutes). The classroom of one of the two students observed had just begun a project that occupied the majority of time that day, and that target child spent more than 75 percent of her time in reading/language arts. The only other subject she experienced that day was science. The other child also had reading, as well as math, science, and electives. The mean proportion of non-instructional time was 14 percent.

We were able to observe both children at the rural Schoolwide-D school but not for the complete whole school day. As a result, we are unable to describe completely the school day experiences of (third grade) children at this site. We know that the school day is 300 minutes, and we can say that during the observations, both children had reading/language arts, math, and science. Both also had electives (one had two and the other three).

Success For All components

Success For All is a structured, intensive early intervention program in reading and language arts which serves students from pre-kindergarten through third grade. The students that are being observed in this study are progressing through SFA from first to third grade. Coordination is not an issue with SFA because the strategy totally replaces other language arts curriculum in the classroom. The SFA program is multi-faceted; the key elements include regrouping students for reading and language arts into groups of homogeneous ability so that most groups contain no more than 15 students; 90 minutes of reading and language arts instruction beginning with a story read aloud by the teacher followed by discussion that introduces new vocabulary and develops oral language skills, comprehension, higher order thinking skills and an understanding of the story structure. First grade instruction uses Story Telling and Retelling (STaR) book, big books and the Peabody Language Development Kits. Enrichment is provided via "Treasure Hunts," which reinforce phonics skills introduced in the story. Tutors (who are certified teachers) may work in the classroom during the reading/language arts period or with one of the homogeneous group of students. They also provide one-on-one tutoring for students who are reading below grade level.

Success For All site SFA-A: Ken's Day

Summary of observations. SFA-A is located in one of the poorest neighborhoods in a large northeastern city. The population of the school is predominantly and increasingly one of Asian immigrants. SFA-A operates as a schoolwide project. As implemented in SFA-A, a second teacher comes into the room to lower the student teacher ratio and the 30 children, who are reading on the same level, are put into two groups within the room. SFA instruction is partially implemented at SFA-A in the WSD reproduced below because the teacher substitutes a basal reader for a portion of the SFA program to prepare children for the district tests. The teacher is worried that the children will not do well on the test, which is predicated on the use of a basal ,so she has decided to give them practice.

Ken is a first grader. He has a broken leg and is on crutches with a big cast. This happened when another child pushed him off the sidewalk near his home. Ken is part Chinese and part Hmong. The teacher believes that he is very bright and that his language deficiencies are the major reason he is still Chapter 1 eligible. Ken is very serious but has either a great fantasy life or likes to tell tall stories—which he does several times during this day.

> 8:45 Ken is in the room early because of his broken leg. There is a story to copy on a wall chart. There is an assignment for the group that will be with the teacher for reading and another assignment for the group that will be leaving for another room for reading. Ken copies with great concentration while other children come into the room and get settled. They all hand in homework and the teacher records it.

8:55 Loudspeaker announcements by the principal, including a long list of children with perfect attendance—most of whose names she has a lot of trouble pronouncing.

9:00 Ken is done with the story and has drawn a picture. Teacher gives him enrichment assignment to see if he can find the words on the Daily Word Chart in the dictionary.

9:05 Teacher closes the door, which is hung with bright red curtains. Students leave for their alternate reading rooms; other children come in for reading. There are 29 children in the room and two teachers. (Although the other one is a certified teacher, she seems more like an aide.)

9:15 Teacher collects stories that children have copied and discusses which of three titles best describes it. Ken nods vigorously when she mentions the right one—obviously the one he chose.

9:20 Students split into two reading groups to the music that she plays. They sing as they move and it is very orderly. One group is with classroom teacher and one with other teacher. Ken is in the classroom teacher's group. They begin to read the story aloud chorally. Teacher periodically asks questions and Ken is so excited to volunteer answers that he stands up on his one good foot and waves his hand as hard as he can.

9:25 Children in this group are taking part 3 of a unit test of reading comprehension, test level 5, Unit 2 from "Helping Out" in *Look Again* by Macmillan, 1989. Ken doesn't follow directions about where to put the booklet on his desk—seems to have a lapse of understanding.

9:38 Silent reading is going on in preparation for taking test. Ken has never lost concentration. Teacher reminds the students to read each story at least twice. Ken volunteers that he has read each story four times.

9:40 Teacher hands out question page and Ken puts down first answer immediately. He tells me this test is "piece of cake for me." (This test is not part of the Success For All curriculum but rather is practice for the district-wide test, which is coming up soon. Success For All does not prepare children for type of test given by district).

9:45 Ken chugging along on questions. Papers are collected. Ken has all the answers right and has had time to fill in all the "o's" in the story. Perhaps this test is not difficult enough for him.

9:55 *Groups change places and Ken goes with group to other teacher who encourages social discussion as enrichment to a story previously read. Ken wants attention; tells teacher that he pulled his own tooth and it "didn't hurt a bit" but won't tell how much money he got. Egged on by the attention, Ken announces that he saw the tooth fairy. "She can go through anything. I saw her fly through the window and go under my pillow." (Other children aren't sure how to react; teacher tells me that Ken is "a trip, just like a little old man".)*

10:05 *The exercise is looking for details in pictures and figuring out what's going on from looking at the picture—apparently a Treasure Hunt. Ken is usually the first to spot and call out details. He is very excited and volunteers all the time. He elaborates with stories reputedly draws from his own life He says he has lived in China, Mexico, Florida and has visited the North Pole ("It's freezing there") where he saw Santa Claus. Santa gave him a ride on his sled; there were lots of little people making toys. Children don't know what to make of these stories—Ken does not seem to care; he is intent on the teacher's attention. She asks him about China. He says that he dropped two eggs on a policeman and that's why they had to leave China.*

10:20 *Teacher is doing exercise on the use of "always," "never" and "sometimes." Ken is quick with answers and is right each time.*

10:25 Children line up to go to art. Ken can't go because it's upstairs and he can't do it on crutches. Teacher promises him she will bring down his art assignment for him, offers him puzzles. He rejects puzzle of U.S.; says he did it last week and two states are missing.

10:30 Ken and I play many games of Tic Tac Toe. He tells me his accident was on April fourth. He has the date on a piece of paper in his desk—for easy reference. It appears that when Ken finds things frightening, he says they are boring as "I don't think I will play outside again when my leg is better—it is boring." "I can go up the stairs with my crutches but that is boring." (His accent is pronounced but he seems to have no problem finding the English words that he needs to have a conversation.) He says that some children are worried about getting to second grade (being promoted) but that he (Ken) is sure he is ready and will go to second grade and that he will be able to do the work, even if it is very hard.

11:30 Lunch and then recess.

12:40 Class is having science. Teacher no longer has another teacher with her. There are 18 children with 10 more out of the room to go to ESOL. Children are coloring in pictures of trees. Ken does careful, painstaking job.

12:50 ESOL children return quietly. Teacher is leading group discussion about the environment and the contribution made by trees. Ken is off-task for the first time this day. Daydreaming? Thinking up new tall stories? Teacher notices Ken is off-task and calls on him. He answers correctly and remains engaged.

12:55 Math begins. Teacher alone with 28 students. Students making groups of ten on paper like this (*//////////*). Ken is done immediately.

1:05 Ken has been waiting since 12:57 while other children work on this. For some, it is difficult.

1:10 Popsicle sticks bundled and rubber banded in groups of ten (with each child getting some singles too) are passed out. The first challenge is to make a group of 25 sticks—the concept of "borrowing" is being introduced. Ken's face is positively alight with pleasure—he loves this.

1:20 Work with popsicle sticks continues. Ken generally has problems solved before the teacher finishes writing them on the board.

1:25 Sticks are collected. Teacher reads names of children who failed to do homework and therefore cannot have recess. Ken's name is not among them. Teacher gives Ken the job of putting away the popsicle sticks. He decides to count them by tens to find out how many there are. By tens, he comes up with 890. With the many single, unbundled sticks, that probably makes a thousand, he estimates. Teacher tells me he is "right on the button." (This is Open Court math). Teacher says she realizes that the work is not challenging enough for Ken in math but that it is difficult to group children when she is teaching alone with so many.

1:30 Other children go to recess. Ken stays in room. Interviewer called out for parent interviews through end of day.

Success For All site SFA-B: Sandra's Day

Summary of observations. SFA–B is located among the housing projects in a large northeastern city. The school is 98 percent Black as is the surrounding neighborhood. SFA–B operates as a schoolwide project. Here, as in SFA–A, the children are regrouped for reading instruction but problems with the transition and the reluctance of the teacher to adhere to the Success for All schedule cause problems and reduce instructional time. The lack of materials seems to be a school problem but the teacher's decision to read a book aloud that is not part of the SFA curriculum is a deliberate decision to deviate from SFA.

Sandra is a first grade African-American girl. She is tall for her age, a beautiful child with an enchanting smile. The teacher believes that Sandra is very bright but may easily become turned off from school. Sandra lives with her mother and an older sister who is primarily responsible for her care.

8:45 Sandra arrives. She is actually 15 minutes late but so are many other children. She goes right to her seat and begins surveying the bulletin board—there is a new calendar for the month of May and Sandra studies it closely. She is one of the children who wears a uniform—about half the girls do—and the hem of hers is held up partly with masking tape. Her white blouse is clean and pressed. There are four children at her table—two boys and two girls.

8:50 All children are waiting while the teacher talks to a parent. With the housing projects right next door, parents seem to "come by" the school quite frequently. Teacher takes attendance.

8:55 Another parent comes in and talks to the teacher. Children are waiting again.

9:00 Teacher says that they are ready to start the day and begins collecting homework.

9:05 Announcements from loudspeaker. *Children begin leaving and entering the room for the regrouping for reading. Sandra is in the top group, which stays in this room.*

9:10 Teacher takes up reading "Pinocchio" aloud with the children in a circle on the floor. The book is not part of the SFA curriculum but a child has brought it in so the teacher has decided to read it. *Sandra volunteers to tell what has happened in the story so far and then listens almost open-mouthed with interest as the teacher reads. You could hear a pin drop in the class right now.*

9:15 Teacher stops reading for today and Sandra is one of the children who says, "No, no, don't stop." *Teacher asks them to predict what will happen next in the story. The majority opinion is that Pinocchio will become a real live boy.*

9:20 Teacher tells me that she has no basal reading books for her reading group because another teacher is not through with them. *The task now is decoding vocabulary words on the board.* Sandra is yawning and stretching.

9:35 *Children are put in two teams to do a word matching game. They line up on the floor, boys against the girls. Sandra is first on her team and matches correctly. She concentrates closely as do all the children who are very excited about this activity. Competition is very keen and encouraged by the teacher.*

9:50 *Back to desks and take out books to review a story for comprehension. The teacher is doing the review, question and answer style, with the whole class. Sandra appears to be daydreaming but can mouth the answers.*

9:55 Some children who have gone to another room for reading come back into the room. The teacher gets angry and tells them to go back, "I can't take these interruptions when I've got my class flowing so good." Children leave again.

10:00 A messenger arrives to take two children to the lobby for a "read-in." Teacher is angry again. "I can't take these interruptions. I'm teaching."

10:05 *Comprehension review, which has survived these interruptions, ends.* Sandra has not really been engaged throughout this time. Her book is torn and one page of the story, which is about a multi-racial pair, one in a wheelchair, seems to be missing. Most books seem to be in sad shape.

10:10 Teacher looks at clock and says she will get to spelling later. Reading was going well and she didn't want to stop it. *All children back from other reading rooms.*

10:15 *Children work with partners in different language arts assignments scattered around room. Sandra and one boy are preparing a dramatic poetry reading.* They are practicing—he reads well but without much expression; she is really an actress.

10:30 Bathroom Break. Line up and go as class with teacher. There are now 21 children in the room.

10:40 Children form a circle around the teacher in the back of the room for science. Teacher has little knowledge of the subject but is apparently trying to enrich beyond the lesson by talking about the animals they will see at the zoo. They begin talking about different kinds of doctors, trying to understand what a veterinarian is. (The teacher makes a couple of mistakes in what different medical specialties are, defining obstetricians as doctors who make reading glasses.) Now they are doing questions and answers from the book. Sandra volunteers, is actively involved; many children are daydreaming.

11:00 Children go to lunch, P.E., and recess.

12:15 Children are drawing zoo and farm animals. Their science lessons are focusing on animals, in preparation for the trip to the zoo. Teacher is working at desk. Aide comes in to assist with math.

12:25 All children are waiting while the teacher explains to a new child in the room what her expectations are in terms of homework and what the schedule of the day is.

12:40 The schedule calls for math now but the teacher says she is going to do a conduct lesson, based on what she saw on the playground. All the children, Sandra included, are wide-eyed and serious. Teacher is obviously upset.

12:50 The teacher has reviewed rules of behavior and is getting children to review what they can and cannot do on the playground. Sandra contributes "no kicking" and tells me that she has seen this and that sometimes she is scared on the playground.

1:15 Conduct lesson continues. Teacher points to the door and the children's heads all swivel to look at it. "I close that door because I want to shut out the world and all the bad influences." Teacher talks about the importance of discipline and of "being on your honor" to be good even when no one is watching. She has the children's complete attention.

1:30 Aide leaves—there was no math today. Sandra is working on her zoo picture again.

2:00 (Observer called out to do interviews with parents).

Instructional time at Success For All sites SFA-A and SFA-B

The school day at SFA-A (a Success for All first grade site) is five hours and five minutes (305 minutes), and our three students spent the morning hours in reading/language arts. All three students shadowed had math instruction in the afternoon, one had science, and the other two students had computers. None of the three had social studies, although all three students' days included an elective and some time spent in independent seatwork. One student left nearly an hour early. The mean proportion of non-instructional time was 16 percent.

The school day at SFA-B, another Success for All first grade site, is also five hours and five minutes (305 minutes), and students spent the morning hours in reading/language arts. We shadowed three students but missed 90 minutes of one student's day, so we can describe only some of what students experienced. During the observations, all three had reading/language arts, two students had math instruction, and the other one (whose observation was truncated) had science and social studies, while the two who were observed all day had neither. Two had electives. The mean proportion of non-instructional time was 26 percent, due to long transitions and a special assembly.

Analyses of curriculum and instruction in adjunct Special Strategies sites

Adjunct strategies are instructional components added to the regular curriculum. The focus of adjunct strategies is on remediation for specific sub-populations of students within a school during some encapsulated period of time (much like traditional Chapter 1 pullout instruction) or the provision of additional instructional time. The emphasis of adjunct strategies may be on the use of specific methods and materials as with Reading Recovery, CCC, and METRA or on time itself, such as extended year or extended day programs. Success For All shares many of the characteristics of adjunct programs (prescribed methods and materials as well as prescribed time) and is therefore included in this discussion. Given their auxiliary nature, an important issue in the examination of adjuncts is the extent to which they are coordinated or integrated with other instruction students receive during the day.

The discussion below is organized by strategy type—Reading Recovery (RR–A, –B), Computer Curriculum Corporation (CCC–A, –B), Tutoring (Tutoring–A, –B), and Extended Time (Extended Time–A, –B). For each adjunct, we look first at the key components of instruction, the significance of coordination, and then focus on the whole school day of a single child in each site in order to illustrate the implementation of the strategy in action. As in our previous examples, we have put in *italic* type the portions of the school day that demonstrate the strategy in action.

Reading Recovery components

Reading Recovery is a first grade intervention which is designed to reduce reading failure by providing high quality intervention through tutoring for first grade students who are having difficulty learning to read. Reading Recovery provides one-on-one tutoring in 30 minute sessions each day in which students read both familiar and unfamiliar materials from a series of mini-books that are part of the strategy. Major goals of the program include helping the child to develop the strategies associated with becoming a good reader, such as using a variety of cues to decode unknown words and using sentences that they compose themselves to help learn the spelling of new words.

Reading Recovery site RR–A: Tanya's Day

Summary of observations. RR–A school is in a small community in the Midwest, which is experiencing a continued economic and population decline. The school population has dropped from 10,000 students to 6,600 in the last three years. As the program is implemented at site RR-A, the Reading Recovery teachers share a classroom and each spends half a day as a classroom teacher and half a day as a Reading Recovery teacher, which helps to enhance coordination between the program and regular reading instruction. The program was faithfully implemented in RR-A, with the observed student receiving a variety of cues for reading and a blend of the known and unknown in her reading material. However, the student is not able to transfer her word decoding skills from the Reading Recovery program to her independent writing in the classroom.

> Tanya is a first grade girl in reading at site RR-A. She is a child of very fair complexion with rosy cheeks, straight short blonde hair and light blue eyes. Tanya is a pleasant child who seldom becomes upset or sullen. Despite an 80 percent hearing loss in one ear, she eagerly participates in all learning.

8:30 Tanya arrives on time and prepares her materials for the day.

8:32 Opening Exercises.

8:35 Student teacher informs students of their tasks for the day: 1) Write your own letter to your pen pal and 2) Thought Log— On a warm day I like to...

8:38 Morning Announcements.

8:40 Student teacher continues list of tasks. Everyone takes out their shiny folders, which provide storage for massive amounts of dittos: following directions ditto, math ditto, cut and paste ditto about the sequence one would follow to make a bed. The student teacher goes over the last ditto with the class and helps them to sequence the events. Tanya is called on to verbally organize the ditto and has difficulty in the process; The teacher does not assist Tanya and she appears frustrated with the task.

8:45 Tanya begins to write her letter to her pen pal. Most students are on tasks but seven students do not remember the names of their pen pals and wait for the teacher's assistance.

8:53 Four students leave the classroom for Chapter 1 reading instruction.

8:55 The teachers passes out writing pads and directs children not to begin other assignments until she has checked their letters to pen pals. Holding up her letter for the teacher to see, Tanya asks if she is finished and is told, "No, you have a long way to go!" Tanya continues to write.

9:00 A student leaves the classroom for Reading Recovery. Tanya is searching through her reader to find a word she wants to include in her writing. The student teacher approaches; Tanya reads her letter to the teacher and the teacher tells her to include more details. Tanya continues to write.

9:23 There has been no direct instruction of any kind yet today. All students are writing letters to pen pals and cranking out dittos while the teacher sits at a horseshoe table organizing papers. Tanya finishes writing her pen pal letter and begins a new project of cutting and pasting sentences in the correct order to show the steps to follow while making a bed.

9:25 Lavatory.

9:30 Art: Tanya's class moves noisily to the Art Room. The art teacher has difficulty managing the students; she has the children spend the first two minutes of class with their heads down. Once teacher has children settled, she takes out a toy zapper gun and begins firing. Students are very excited; they discuss space age designs and the parts needed to construct a robot.

9:45 Tanya helps art teacher pass out paper to make tear-art robots.

9:50 Students begin to create robots. Tanya tears out a round pink head for her robot. The robot's body is a long green rectangle. She continues to add features to the robot.

9:54 Students must clean up and bring projects to a close. Students only had four minutes to actually work on robots. Tanya helps collect materials at each table.

10:00 Tanya and her classmates return to the classroom. There is no discussion of what just took place in art. The student teacher immediately begins reading the story "The Big

Honey Hunt" while students continue to work on dittos. During the story reading, Tanya works on her math ditto. Seven children leave the classroom for Chapter 1 Reading.

10:12 After reading "The Big Honey Hunt," the student teacher directs all students to take out their reading books and look for a story that reminds them of the story they have just heard. Tanya finds her reading book and turns to page 63. Teacher directs students to look at the story picture; as a group they read the first page. "The bees are mad. What will go on?" Teacher then directs children to draw three pictures, telling what will happen next. The teacher draws her three pictures on the blackboard. Tanya draws her pictures and then the teacher tells Tanya she is on the wrong page.

10:32 Seven children return from Chapter 1. The teacher quickly explains what to do but they don't understand because they missed the entire lesson. Both students and teacher appear very frustrated. Tanya continues to work on her picture predictions and shows her work to the teacher. The teacher says "good, put them in your book and get busy with your seat work."

10:45 Tanya puts her reading book and materials away and continues with the ditto.

11:00 Tanya writes for a few minutes in her journal about playing with her cat. Her writing is hard to read and she makes numerous letter reversals. Tanya doesn't independently transfer Reading Recovery strategies to the regular classroom.

11:15 Lunch

12:15 The teacher gives students more dittos for their shiny folders. Tanya starts work on her math ditto, using the number line on the blackboard as a tool. Other students work on dittos while the student teacher sits at horseshoe table and writes yet another ditto. The student teacher does not monitor students' work and does not assist students who need extra help.

12:30 *Tanya leaves the classroom for Reading Recovery Tutorial.*

12:35 *Tanya begins the Reading Recovery lesson by reading the story "Pardon, Said the Giraffe." She has difficulty with the word "what's." Teacher gives Tanya strategies for identifying the word "what's." "Get your mouth ready, what sound do you expect to hear first?" Tanya comes to the word "oops" and says, "Do I have to read this?" They stop reading this story and move to a more familiar story called "Hands."*

Teacher reminds Tanya to read carefully. She reads this story more smoothly than the first. The teacher keeps a running record of Tanya's reading—keeping track of all her correct responses, mistakes, and self-correcting strategies used during the reading. After the story, the teachers reviews what is positive about Tanya's reading and how she was able to correct the tricky parts of the story.

12:40 *Tanya dittos a story to her Reading Recovery teacher. She practices writing her story, "I Like to go to Jackson," in her Reading Recovery journal. The teacher thinks Tanya will need help with the word Jackson but Tanya was able to write the word J-A-C-K because there is a boy named Jack in her class. Tanya is engaged by making that link. The teacher writes Tanya's story on a sentence strip, which she cut apart as Tanya read each word. Tanya is quickly able to put the words in the correct order to reproduce her own story.*

12:50 *The Reading Recovery teacher introduces a new story to Tanya called "When Lana was Absent."*

12:53 *Reading Recovery teacher and Tanya read the new story together.*

12:55 Tanya returns to the classroom. The class is working on an art project but Tanya does not know what it is all about.

1:07 Tanya puts her hand up for directions as to what to do next.

1:10 Tanya's hand is still up.

1:12 The teacher finally acknowledges Tanya. She is told to draw two peace symbols because the class is making a peace quilt. Tanya begins to draw peace symbols on two papers.

1:25 The project is very disorganized with most students not sure what they are doing. Tanya finishes her peace drawings and the teacher puts holes around the edges. Tanya uses yarn to sew the two peace drawings together and stuffs the sewn papers with torn newsprint.
1:37 Lavatory.
1:40 Recess.
2:00 (Missing data because of interview with Tanya's grandmother).
2:25 Music.
2:55 Dismissal.

Reading Recovery site RR–B: Judith's Day

Summary of observations. The site for RR–B is a small town in the west, which is experiencing rapid growth. The town's population has doubled in the last ten years and the schools are adding new classes and portable classrooms to keep pace with growth. As the Reading Recovery program is implemented at RR–B, the Reading Recovery teachers do not teach any regular classes at all. This may be responsible for the lack of coordination exhibited in the WSD below in which a student receives contradictory advice from the Reading Recovery and classroom teachers.

> *Judith* is a first grade girl. She is an attractive little girl with cream colored skin, straight brown hair and big brown eyes. She is tall and thin and wears a long beige sweater dress. Judith seems to enjoy school very much from a social perspective. However, academic activities often create frustration and there is need for one-to-one attention.

9:00 Judith arrives and quietly prepares materials for the day's activities. Judith takes part in the class meeting (lunch count, attendance, calendar, weather, row by row daily news and desk neatness check).
9:15 Classroom teacher reviews daily activities with the class. "Today we are going to color and cut out the outline of a duck. Tomorrow we will write a story about that same duck. Copy the joke of the day on handwriting paper. "
9:45 Judith begins to copy the joke of the day.
9:47 Judith's reading group (The Dolphins) is called to the back of the classroom. Students are directed to turn to page 168. The group starts reading a previously learned poem. Judith does not follow along while individual children read the poem, but does participate in the choral reading of the poem.

After the reading of the poem, the teacher introduces a new story to the group. "Who Helps: Bear Cubs?" Students engage in a round robin reading activity. Judith's reading is very choppy. the teacher does not reinforce any of the RR strategies Judith has been learning. As other children read, Judith follows along with her finger. After the story reading, children are directed to turn to page 26 in their reading workbooks. No more instruction or directions are given concerning the workbook. Children return to their seats to work on the /i/sound. This workbook page does not relate to the story the children have just read.

10:15 Judith returns to her seat and continues copying the joke of the day. Judith seems to have difficulty concentrating on her seat work; she is constantly stopping, turning around, looking through her folder for papers, etc.
10:20 Judith has finished copying the joke on the front of the page and is now writing the answer on the back. She will soon draw a picture to illustrate the joke. Judith places her completed assignment in the "joke of the day" folder. Judith now begins to color her duck.
10:30 Recess.

10:45 Upon returning from recess, the classroom lights are off and the children sit quietly with their heads down for ten minutes.

10:55 Judith is now completing her duck activity paper.

11:15 Judith is now looking for another ditto to work on before lunch. She looks through all her papers, sorting them into piles of completed and non-completed papers. Judith is currently off-task.

11:25 Students are directed to clean up the classroom and prepare themselves for lunch.

11:30 Lunch.

12:15 Judith returns to the classroom and selects a favorite story to read. She appears to be enjoying the activity.

12:30 Parent Interview.

1:30 *Judith leaves the classroom for Reading Recovery instruction.* She is prepared for her RR lesson, she has her materials and is eager to begin the lesson. *The RR teacher spends the first two minutes of the lesson taking the words here/and/out to fluency. An outcome of that activity is that Judith made linkages to other words. (her, he, our, on, and of). Judith reads the story "When Dad Came Home." There are some tricky parts, but Judith is able to self-correct. Judith and her RR teacher review the story "Moggy Goes on a Picnic," and then Judith reads the story as the teacher keeps a running record. RR teacher praises Judith for the ability to use RR strategies to self-check and for reading the story better today than the day before.*

1:45 *Judith is now ready to write a story. She chooses to write about her swing set. "My dad is going to put some new swings up." Judith begins to practice her story. She needs to practice the words "new" and "swings" on her practice page, but for the most part does an adequate job of writing her story. RR teacher introduces a new story about Moggy. Judith begins to read the story in a disconnected way; however she uses her self-checking strategies and catches herself in several places. Along the way Judith finds many small chunks of words in bigger words. She enjoys pointing these words out to her teacher. To bring closure to the lesson, the RR teacher and Judith read the new story together.*

2:10 Judith returns to her classroom where we find the class cleaning the room. Judith joins in the activity and puts materials away and picks up paper near her desk.

2:15 Recess.

2:30 Music.

3:00 Dismissal.

Instructional time at Reading Recovery sites RR–A and –B

The RR–A school day (first grade) is 320 minutes. Both students observed had student teachers. Both students had reading/language arts, including 25 minutes at a pullout Reading Recovery session. Neither had math, science or computers; one had social studies, and both had two electives. The two students also spent time in seatwork, and an average of 28 percent of their time in non-instruction, due to one student's 45 minute-late arrival and to the student teachers' developing classroom management styles.

The school day at site RR–B (first grade) is 300 minutes (five hours). One student was not observed for 30 minutes (during an elective). The two students observed both had reading/language arts, including 40 minutes at a pullout Reading Recovery session. Neither had math, social studies, science, or computers. The students also had at least one elective; one student had two electives and had seatwork as well. The mean proportion of non-instructional time was 12 percent.

Computer Curriculum Corporation (CCC) components

Computer Curriculum Corporation (CCC) has developed an educational software program for computer-assisted instruction, which is intended for elementary through adult-age learners and is used in this study for grades three through five. The program features an integrated learning system that includes assessment, monitoring, feedback, and record management in a variety of skill areas. Instruction is typically delivered in a dedicated computer lab providing one-on-one on-line instruction for 11 minutes (math) and 13 minutes (reading). Laboratories are staffed by trained para-professionals. Coordination is built into the program through skills mastery reports and skills assessments that feed back from the computer to classroom teachers. However, it is unclear so far to what extent teachers either know how to use the reports or choose to use them in planning their curriculum.

Site CCC-A: Sharon's Day

Summary of observations. CCC-A site is a small southwestern town on the Mexican border with a school population that is 98 percent Spanish-speaking. The town is populated by an increasing number of migrant workers and close to 90 percent of the students at CCC-A are eligible for free and reduced-price meals. Site A is a schoolwide project, which is important in the implementation of CCC in two ways: 1) it means that whole classes of children attend the laboratory at once and therefore children do not miss regular classroom instruction, and 2) teachers accompany the children to CCC so that coordination with regular instruction is enhanced in an informal way. Physically, the laboratories where CCC instruction is delivered at Site A are separate from other classrooms, carpeted, and roomy enough for children to work and aides and teachers to circulate.

> *Sharon* is eight years old and is in the third grade. She is tall among the girls in the class and is athletically built. Her parents came here from Mexico and Sharon spent last year in the "transition" class learning English, which she mastered with a 70 percent at the end of the year to become a regular student.
>
> 8:00 Students are changing classes for reading and language arts. Sharon, who does not move, sits quietly at her desk, which is empty of books. There are 15 students in the room for reading/language arts.
>
> 8:05 The teacher asks the students if any of them have seen the news—no one has. In keeping with the major unit they are doing on the environment, the teacher tells the class about a local river where fish are dying from pollution—Sharon appears to be listening. Now, the teacher asks if any of the students have brought bottles or plastic for recycling in a barrel they keep in the room; several children have but Sharon has not.
>
> 8:10 The lesson is a continuation of a thematic unit on the environment, which centers on a book called "The Wump World," in which gentle little creatures called Wumps are invaded by "The Pollutants," who, having ruined their own world, are now bent on destroying the Wump's World. The teacher gives back drawings that the children have made of the Wumps' world and asks each child to tell a story about his/her picture.

8:30 Handing back of papers has just ended. The teacher borrows a black and white photocopy of the book from another teacher (all the third grade teachers are using the book and there is apparently only one copy) to show the children what Wumps and Pollutants really look like. (Wumps are vaguely walrus-like but Pollutants look a lot like human beings). Sharon seems very interested but is still quiet.

8:35 The teacher describes what they are going to do next. "We are going to make a diagram of how Wumps and Pollutants are similar and how they are different." She uses the overhead to start constructing a Venn Diagram with the children. Sharon is not one who volunteers any answers.

8:55 Children break into small groups to continue thinking of similarities and differences by brainstorming. Sharon's group sits together but each does his/her own list. Sharon puts down several things, showing she understand similarities and differences, and then checks with the girl next to her to see her list.

9:35 Discussion of similarities and differences and construction of actual Venn continues. Sharon is engaged.

9:45 Teacher tells the students to get out their spelling books. Sharon (and others) do not seem prepared for this and there is much scrambling in desks for books. The lesson consists of reading words aloud and using them in sentences. Sharon is called on for "shovel," which she can spell and pronounce but cannot use in a sentence.

10:00 *The class goes to Computer Lab for CCC. They are accompanied by the teacher and the student teacher and there is a para-professional in the lab as well. The transition is quickly done and children settle down immediately to work on the computer. Sharon is working on vocabulary and comprehension and is very interested in her grade on the test, which is 80 percent. She smiles and shows her neighbors the colorful display of fireworks on her screen to reward her.*

10:15 *CCC transitions to math and Sharon confides that this is her favorite subject. The lesson consists of reading numbers: "9 thousands, 0 hundreds, 6 tens, and 4 ones." Sharon is completely engaged and does very well at 90 percent. When she is stuck, she calls for help immediately and gets it just as quickly from the student teacher.*

10:31 Back in room. Teacher has students stretching and taking deep breaths. *Sharon tells me "I think I am getting smarter, I used to do in the 60s (for grades), then the 70s, now the 80s. Next year, it will probably be RW (the highest grouping in the CCC lab).* The teacher has children copy their spelling words from the board.

10:45 Teacher is reading aloud from the black and white photocopy of "The Wump World." Without color, the book is hard to get excited about and Sharon is obviously daydreaming. "Next is lunch," she tells me.

11:00 Lunch.

11:35 The teacher continues to read aloud—she has finally gotten the actual book of The Wump World. Children form a circle around her on the floor—it is the first time all day that they have worked in the classroom away from their desks. As the reading progresses, the teacher tries to relate it to experiences the children might have had. For example, with a picture of a skyscraper, she asks how many have been to Dallas.

12:00 Transition to math. The students never seem to be sure what is coming next—at least it appears that way since they do so much fumbling around in their desks to find the right books. The lesson is reviewing yesterday's introduction of two-digit multiplication. Children come up and do problems on the board. Sharon volunteers every time and when she goes to the board does a problem quickly and correctly. She tells me that she loves math and that "Sometimes I don't understand one day but then the next day I do. I understand everything."

12:25 Teacher finishes an oral review of patterns in multiplication and puts problems on board for students to do on paper. This is a little quiz and Sharon is one of the first to finish at

12:35. Children can go get books when they are done from the class library, which consists of about two dozen books.

1:00 Class goes to school library.

1:50 The teacher tells the class they have been chosen to go to K-Mart to receive coloring books and stickers because of their excellence in recycling—students are very proud; Sharon is very excited about the trip.

2:00 Science books come out with the usual scrambling. "Science," Sharon tells me, "that's another thing I hate." The book is Accent on Science, 1985, and the teacher uses the manual. The unit is about the moon and the teacher begins by talking about all the ideas that people have had about the moon in history and folklore. Sharon seems attentive but does not take part in discussion. At one point, the teacher asks if any of the children believe that the moon is made of green cheese. Sharon's best friend Laura answers quickly "Oh, no Miss. If the moon was made of green cheese, we would have no rats at our house because they would all go there."

2:10 The lesson consists of reading aloud and discussion after each paragraph or two. There is also a word list with definitions. Sharon gets her dictionary out of her desk to compare the definitions in the science book with the ones in the dictionary. This is her own idea; none of the other children is doing it.

2:20 The lesson is cut short to get ready for rehearsing for the circus that the class is going to put on in two days. This is a major undertaking and there will be costumes—Sharon will be a clown. She prefers being a clown to a ballerina, which was her other option.

Site CCC-B: Fredrick's Day

Summary of observations. CCC–B is located in a small town in a southeastern state. The school is in an area of the town that is particularly poor and particularly rural and is composed predominantly of African-American students. The project at CCC–B is a pullout project since it is not a schoolwide project. In contrast to CCC–A, children attend in small groups (losing time in their transitions since they go alone) and teachers seem to know very little about what goes on in CCC. Physically, the laboratory is small and cramped as well as being right next to the office and teachers' room where there is a lot of traffic. The principal's decision to inundate the laboratory with students has added to the rush and crowded conditions, which is evident in the WSD below.

Fredrick is a tall, slender, third grade African-American boy who is extremely shy and quiet. The teacher says that Fredrick is not as slow as he appears in class. He is an artist of some talent and "lost in another world" most of the time, she says.

7:45 Fredrick goes to his homeroom and sits quietly while the teacher takes attendance and does housekeeping chores. None of the children has anything to do at this time.

7:50 One child gets to go to pledge of allegiance outdoors, which is attended by "representatives" of each class. Fredrick continues to sit quietly.

7:55 Fredrick goes to Chapter 1 classroom for Chapter 1 Reading, which is across the small campus and which is actually the stage—dark, dreary, cartons piled around blue, cement block walls. A curtain separates the stage from the cafeteria, where workers are cleaning up from breakfast and chatting audibly. Two teachers work here. There are six children with this teacher. She hands out a sample test for a standardized end of year sub-test they are about to take. Fredrick is yawning and stretching.

8:00 Fredrick starts test. He is aware of me observing him and smiles apologetically at me every time he has to erase something which is frequently.

8:10 Several children are done with sub-test but Fredrick is not. Still concentrating and moving lips as he reads. Principal interrupts over loudspeaker with announcements.

8:15 No one else is still working but Fredrick living up to his reputation as slowpoke, is still concentrating and making progress.

8:20 Fredrick is done and looks up at the teacher. They must have been waiting for him because she immediately tells them to begin on next sub-test, which is on alphabetical order.

8:25 Either Fredrick finished very quickly or he can't do it. The teacher tells him he worked very hard on first the test and this is good chance for him to rest. Now, they are all waiting for some children to go back and finish first test—several forgot to turn the page and do remaining items. Why didn't teacher check when they got done so fast?

8:30 Teacher starts next sub-test, which is on use of glossary. Fredrick is back to a deliberate pace—he's yawning and seems about to go to sleep.

8:36 Fredrick is done or has stopped. Teacher is at desk correcting papers and doesn't notice him.

8:40 Teacher tells Fredrick he can go and pick out a book and stickers—books and stickers come in a plastic bag; the point is to pick out the right sticker and paste it in. Fredrick doesn't open the bag— he just sits there.

8:45 Fredrick is still just sitting there. Dismissed and back to classroom.

8:50 Teacher is angry that kids who are supposed to go to computer didn't leave on their own initiative. This is half of class but not Fredrick. Much bustling as she herds them out of room.

8:55 Teacher continues lesson. Fredrick and two other boys who were at Chapter 1 reading are left to sink or swim. Fredrick looks at boy next to him to figure out what book and what page—apparently this is spelling.

8:57 Fredrick is called on but hasn't a clue what's going on or what he is supposed to do. Teacher calls on another child.

9:00 Teacher puts on the TV to hear "Reading Rainbow." Kids, including Fredrick, completely engrossed.

9:10 Students mostly watching with some animation. Fredrick has head on desk—resting again. Teacher enforces absolute quiet while she works at desk, doing paperwork.

9:20 Program is over. Teacher says she will tell them true story about her father who was a pilot and flew small planes until partially blinded in an accident. Father died recently and teacher is crying over memories. Fredrick and other children seem bewildered about how to react.

9:25 The teacher hands out newspapers for lesson on finding and understanding the news. Fredrick is listening attentively.

9:30 She hands out assignment sheets. First question "Find a science story on page one." The questions look very difficult and newspapers are awkward for children to handle on small desks. Fredrick does not put up his hand as one who knows the answer to the first question.

9:35 Fredrick is still trying to find answer to first question.

9:45 Teacher allows children to get on floor with newspapers but does not allow them to work together. Fredrick and one other boy are the only ones who do not get on floor.

9:50 Most children are on about #7 but are off-task more than on. Fredrick is on #3 but still working hard.

10:00 *Time for other half of class to go to CCC lab. Fredrick is in this group.*

10:05 *Lab is full—it's SRO. The lab para-professional explains that the principal "decreed" that all first and second graders attend CCC as of March 1. This was an idea he saw in* *another school and refused to take into account that it would overwhelm capacity of her tiny lab, which has eight stations and is a very small room. Fredrick and others stand behind children who are at the computers and wait their turns.*

10:10 *Fredrick actually commences work on computer. He's doing reading exercises. Gets #1 right; gets #2 right. Gets an 82 percent. Not particularly excited about it.*

10:17 *Fredrick is told that his turn is up. (He's had seven minutes on the computer)*

10:20 Fredrick's group is back in class and back to the newspaper assignment.

10:25 Teacher goes over to look at Fredrick's work. (This is his first interaction with her since she called on him at 8:57). Asks him: "Why did you skip #2?" "I couldn't find it." "You can't skip things. You have to try until you find it. Go back to #2."

10:30 Teacher is having children give choral answers to the questions. Fredrick does not join in. He is reading devotedly.

10:35 All is as before. Teacher checks on Fredrick again. No words exchanged.

10:40 Teacher gives directions for behaving in line, because it is time to go to music. From there, they will go to lunch. Fredrick seems to be daydreaming. The teacher hands out permission slips for next week's trip.

12:00 Back to the newspaper assignment. Fredrick is yawning at his desk.

12:10 Fredrick is reading paper again or looking at it—not writing anything.

12:13 Fredrick finally gets on floor and reads quietly with his back against the wall. Seems isolated from other children, many of whom are talking to each other although the teacher keeps saying "no chitchat."

12:20 Most of the children are done with all 18 questions but Fredrick is on #7. Teacher begins to work with him individually. She tells him to keep going! keep trying!

12:30 Back in seats and reviewing answers. Teacher calls on Fredrick twice and he has the right answer both times. He never volunteers.

12:55 Newspaper lesson ends at last. The teacher has children put their heads on their desks to think about upcoming multiplication table review.

1:00 Fredrick is called on for 2 x 7 and gets it right, but misses 2 x 8.

1:05 Teacher puts on sing-along record of multiplication table. Fredrick smiles (for about the first time this day) and sings along. Seems to know up to 4 x 8 well enough to sing them.

1:10 The teacher plays the record again. Fredrick seems engaged.

1:15 Beginning of housekeeping chores and announcements.

1:23 Still housekeeping

1:25 Line up for recess. Day is over.

Instructional time at Computer Curriculum Corporation sites CCC–A and –B

The school day at CCC–A is the longest of all third grade sites (and of first grade sites): 420 minutes, or seven hours. All three students had reading/language arts, including time at the CCC lab. One student also attended a resource room for reading. All had math, again, including time at the CCC lab, and two had social studies, one had science, and all had electives. All three students' classes also spent an hour or more rehearsing for a circus. The mean proportion of non-instructional time was 26 percent, including the circus rehearsal time; excluding the circus time, the mean non-instructional time drops to 11 percent.

The school day at CCC-B (third grade) is 325 minutes, or five hours and 25 minutes. One student's regular classroom teacher had been called away unexpectedly, and the substitute had been instructed to conduct end-of-year testing for the class. As a result, that student received no instruction but rather was tested or given busywork for the entire day—excepting his 15 minutes of pullout time at the CCC lab. We did not observe that student for his entire school day. The other two students had reading/language arts, including 15 minutes pullout time at the CCC lab and pullout time for Chapter 1, during which they were tested. One student had math, the other had computers, and one student also had an elective. The mean proportion of non-instructional time was 25 percent, due to the number of transitions between locations and proximity to the end of the school year.

Tutoring components

Tutoring strategies are offered through the METRA program and through peer and cross-age tutoring programs. Those programs are being examined in grades one through three during the course of the study. METRA is a highly structured learning system for students who have difficulty mastering early reading, math, and language skills. It employs para-professional aides who work with children individually five days a week, three of these devoted to improving reading skills and two to improving comprehension skills. Independent reading is a focus of the program two or three times a month, in which students read a story together and tutors then ask questions to test comprehension.

Tutoring-A: Ron's Day

Summary of observations. Tutoring–A site operates the METRA Program in a small but growing town in a southern area. The school is a neighborhood school serving a student population that is predominantly white but with a 15 percent African-American population. As implemented at Tutoring–A, the only coordination between the METRA tutors and classroom teachers is informal. The WSD reproduced below shows that on this day, METRA provides a set of strategies for attacking new words that is slightly different from that used in the classroom. In Tutoring–A, only students repeating first grade receive METRA; thus it is a "remedial" strategy.

> *Ron* is a tall, quiet, African-American child who is repeating the first grade in a rural school in the southeast. He was retained in first grade because of his inattentive, rebellious behavior last year but, reportedly, his behavior has turned around over the summer and he has become a "sweet kid."
>
> 8:33 The day begins with the Pledge of Allegiance. The teacher shows the class of 23 students how to transplant petunias into pots that the students have decorated with Mothers' Day greetings. The transplanting is to be done independently at the science table throughout the day. Ron listens attentively, his chin in his hands.
>
> 8:50 The teacher writes a five-line story about toads on the front chalkboard and asks the students to recite it: "It is usually easy to tell a toad from a frog..." The students are asked to copy the story and draw a picture to illustrate it. The day's spelling words (bike, ride, nine, hide, like, time,) are recited in unison and then copied down five times each. The rest of the day's assignments are three worksheets in spelling, math, and coloring (with frog and toad themes).

9:02 While the teacher takes a three minute coffee/bathroom break, the class begins to copy down the story. Ron loses his concentration for about two minutes and trades gossip and spit balls with a classmate.

9:09 The first reading group of 11 children, including Ron, joins the teacher at the back of the room, while the other pupils continue doing seat work. The teacher presents ten new reading words printed on a flip chart (voice, stranger, company, minute). The group repeats the words, then reads a poem silently while the teacher writes on the board the names of four students, including Ron, who are allowed to use the classroom's Apple IIE computer after they have finished their work. After quizzing the reading group on the context and meaning of the poem and new words, the teacher introduces a story about a man called Mr. Odd Jobs, who makes friends with a stranger named Floyd. The group reads silently; Ron is on the wrong page but hides the fact by holding his book straight up. The teacher calls on Ron and gently reminds him of the correct starting place. Although he reads slowly and haltingly, his reading is essentially correct and he receives strong praise for his effort.

9:49 When the first reading group is dismissed, the second group takes its place. After four minutes of seat work, Ron gets a drink of water and returns. At 10:05, he stops copying the story and listens to the story the teacher is reading to the second reading group. Restless, he daydreams, tussles with classmates over some pencils, wanders to a bookshelf, chats with someone at a different table, and checks out the plants in the window. At 10:10, he settles down and works. At one point, he goes over to the teacher with a question, and get her help immediately.

10:39 At the teacher's reminder, Ron goes to his 15-minute METRA tutoring session. *The tutor reviews the pronunciation of "str" and "shr" words. Ron recites a list of these sounds, with some hesitation and assistance from the tutor, and get two gold stars for finishing the sixth cycle of lessons (Lessons 14-28) in the METRA workbook. He pastes the stars on a congratulatory form letter to his family, which the tutor reads aloud. They then start on "und," "and," "end," and "ind" sounds. The tutor quickly correctly Ron's mistakes, explaining the difference between short and long vowel sounds.* Ron is dismissed when the lunch bell rings at 10:55.

10:55 Ron has lunch in the cafeteria.

11:30 Recess is outside but is restricted to the tarmac because the ground is too muddy.

11:55 Another first grade teacher brings the class in from outside. Ron begins a picture matching game with two other boys while other students plant petunias, quiz each other with flash cards or play a spelling guessing game.

12:05 The teacher lines up the class and marches them to the school library after lecturing them on proper library behavior. Sitting in a rocking chair, the librarian reads the Beverly Cleary story "Socks" to the class gathered at her feet. Ron is lying on his side in the back of the group. He and most of the class are not paying attention to the librarian.

12:19 The librarian gives up and threatens to send the names of misbehaving students back to the classroom teachers; she directs the students to pick out and read their own books. Ron and tow friends look at a non-fiction book about dinosaurs.

12:45 The teacher reads a chapter from one of Cleary's Beazus and Ramona books after reminding the class how to listen to a story. Ron and the rest of the class appear engrossed, laughing at the humorous sections.

1:05 The teacher outlines the week's math unit: counting with coins (pennies and nickels) and measuring with rulers. After being told that grown-ups make change by counting by fives, the class counts by five up to 100. Not one of the students correctly guesses the identity of the president on the nickel. The class is interrupted by an intercom announcement. Meanwhile, a child loses a tooth, which the teacher has him deposit in a special container.

1:19 The teacher leads the class through a row of workbook addition problems. Ron gets his math problem correct. The students are assigned a homework task: to go home and count up the nickels and pennies in their parents' pockets. At 1:37, the class begins more math seat work. Ron plays patty-cake with a friend for a few minutes before starting to work.

1:41 A fire drill drives everyone outside. They stay outside for recess and return to check the rest of the math and work with crayons and construction paper until the end of the day.

Tutoring-B: Reginald's Day

Summary of observations. Tutoring-B, which uses peer and cross-age tutoring, is located in a small town in the western United states, which is dominated by the Church of the Latter Day Saints. The school population is 91 percent white. Coordination in the first grade, which is the one under observation here, is not an issue since all children participate in the peer tutoring program and it is not separate from other instructional services. In Tutoring-B, first graders are assigned to teams and then paired within their teams. Students work on spelling and reading, taking turns as tutors and learners. Twice a week, low-achieving first graders spend 30 minutes in the "Listening Center," where para-professional aides use audio-taped stories, directions, and work sheets in a structured, sequential program to improve students' listening and oral comprehension skills. In the WSD that is reproduced below, peer tutoring is one of several reading and language arts strategies used within the school day and is apparently not notably more effective than the others in holding the attention of the target child.

Reginald is a shy and reserved first grade boy who is much smaller physically than the other students in his class. Reginald participates in the Chapter 1 program as do four other children in this class.

9:15 Reginald is chatting with other children as the students file into the classroom to begin the day. The teacher instructs all the students to be seated and she dispenses with some administrative tasks (e.g., lunch count, attendance).

9:30 The entire class goes to the library. Reginald has a book to return.

10:00 The class returns from the library and pledges allegiance to the flag. The first classroom activity of the day relates to the calendar. The students are instructed to sit on the floor in front of a bulletin board and Reginald is selected to lead the class discussion. He uses a pointer to indicate the date on a calendar and tells the class the day and date. He asks the class, "What day was yesterday?" and calls on one of the students to answer. Because our visit to the class was on the 15th of May, the entire class counts from 1 to 15. One of the students asks how many days of school are left, and the teacher leads the class in counting off the remaining days while Reginald indicates them with the pointer. Reginald calls on one of the students to choose a physical activity to perform while they count the days of the week and he suggests that they hop. Because we observed the class on Wednesday, the class hops while counting off the days from Sunday through Wednesday. Reginald also hops while pointing to the days on the calendar. The combination of hopping and counting helps the students coordinate their mental thoughts with their physical actions.

Next, the students turn to the weather and Reginald calls on the class to identify the season and today's weather. The students respond that it is "spring" and that the weather is "sunny" and "cold." Reginald indicates their responses on a graph that is stapled to the bulletin board. Finally, the students sing along with a song on audio cassette which goes through the twelve months of the year. The teacher instructs them to stand up when their birthday month is sung, and to sit down when it is sung a second time.

10:15 The students return to their desks and the teacher begins explaining about the field trip they will take Friday to the fire station. She also announces that there will be no reading groups because the class went to the library, and that they will work in their workbooks and read with partners (peer tutoring). Students are instructed to open their workbooks to a certain page, and to circle the word that the teacher reads. Reginald is following the assignment closely and it appears that he answers all of them correctly. The class moves on to a "fill in the blank" assignment with multiple choice answers, and then to an oral reading exercise. When it is Reginald's turn to read, he sounds out some of the words but appears confused by the patterns of the letters. Reginald begins to lose interest and starts playing with his pencil. The teacher notices that he is distracted and snaps him back to attention with "Yo, Reginald."

Reginald is starting to lose attention again and he begins playing with his pencil. Meanwhile, the teacher is explaining to the class that later in the day they will finish constructing their paper flowers and then staple them to the bulletin board.

10:33 Reginald opens his workbook and begins the next reading assignment.

10:35 The Chapter 1 aide arrives and calls over to the listening station the four Chapter 1 students (including Reginald). Reginald is slow to put on his earphones. While the aide readies the equipment, Reginald watches the classroom activity in a way that suggests he wishes he was not at the listening station. When the tape begins, the four students nod or shake their heads in response to the questions on the tape. Reginald begins to pay attention and moves one seat closer to the group. Even though he appears to be listening closely, Reginald answers one of the questions incorrectly.

10:55 Everyone has completed the workbook assignment (including Reginald) and now the class is cutting paper stems and leaves for their flowers. After the flowers are completed the teacher staples them to the bulletin board. Reginald does not appear to interact much with the other students, including the one boy that his mother identified as his friend. He works alone at his desk and rarely converses with any of the other students.

11:05 As the students finish up their flowers, they are dismissed for recess. Reginald finishes, cleans up his desk, and runs outside. On the playground, Reginald plays with one other child on the slide.

11:23 Reginald is back from recess and slumped over his desk.

11:24 *The teacher instructs the class to prepare for reading with partners (peer tutoring). Reginald pairs off with his partner and the partner begins reading. When the teacher notices that he is not following his partner's progress, she reminds Reginald to do so. He obeys her instructions immediately, but then Reginald stops again when she walks away. This continues while his partner reads—Reginald only paying attention when the teacher notices him.*

11:33 *Reginald begins reading. His partner monitors him very closely for the six minute reading period. When it is time to turn in his score, the teacher has to call on Reginald twice because he is inattentive.*

11:50 Lunch.

1:00 Group activity in progress.

1:08 The students move back to their desks and the teacher hands out a math quiz. The students are given one minute to complete as many problems as they can. The problems on the quiz vary and reflect the different skill levels of the students. Reginald's problems are at the lowest level.

1:15 Teacher is presenting the concept of "one-half" while Reginald plays with his pencil. His attention momentarily returns, but then he slides down in his seat and rests his head on the seat back. He does not join in the class responses.

1:22 The students (including Reginald) pull out their math books and begin a work sheet on "equal pieces." Reginald finishes his first work sheet and begins working on a second. He does poorly on the addition and subtraction problems, committing 16 errors out of 36 problems.

1:45 Reginald begins handwriting assignment.

1:49 Reginald completes handwriting assignment and begins interacting with neighbor.

1:50 Reginald begins art project ("draw a picture of a whale").

2:01 Reginald completes his picture and has an angry exchange with his neighbor. I couldn't hear what happened, nor did the teacher, who was busy with another student. Reginald's whale picture appears somewhat grim.

2:06 The students are getting anxious for recess and start milling around the classroom.

2:10 Recess.

2:33 The students are back from recess and sit in a circle on the floor for a game. Reginald appears to enjoy this game, as do other students.

2:57 Physical education, end of school day.

Instructional time in Tutoring-A and Tutoring-B

The school day at Tutoring–A is the longest for first grade sites: 330 minutes. All three students had reading/language arts, including 15 minutes each in pullout METRA tutoring sessions, and all three had math in the afternoon. None had science or social studies, and two had two electives, while the third had one. All also spent some time in independent seatwork, ranging from 10 to 78 minutes. The mean proportion of the day used in non-instruction was 15 percent.

At Tutoring–B we were able to observe only one child for the entire school day (the other two children were observed, but minus 100 and 80 minutes, respectively). As a result, we are unable to describe completely the school day experiences of (first grade) children at this site. We know that the school day is 275 minutes, and we can say that during the observations, all three students had reading/language arts, including 15 minutes for whole class peer tutoring, and math. Two had electives, one had seatwork, and none had science, social studies, or computers.

Extended time components

Extended Time Strategies provide more instructional time for students by adding time to the school day or to the school year. The additional time may be used to introduce additional activities that enrich learning or to reinforce learning that has taken place during the regular instructional day or year.

Extended Time-A: Willie's Day

Summary of observations. Extended Time-A uses an extended day strategy called the "Chapter 1 Club." It is held daily for 30 minutes after the school day ends and uses age-appropriate books as a basis for developing language skills in students from first through third grade. The issue of coordinating the Chapter 1 Club with other instruction does not arise since the intent of the program is to serve as a separate set of enrichment activities, which are related to the regular academic curriculum. The program operates in a town located in a large agricultural valley in a western state about 50 miles from the Mexican border and has a population that is 85 percent Mexican heritages. The region is dependent on agriculture and is undergoing economic hardship. This program operates in only one school—it was devised by one of the teachers in the school. As implemented in Extended-A, the extended day provides additional reading practice and hands-on enrichment activities as demonstrated by the WSD that is reproduced below.

Willie is an African-American first grader. She is a quiet child, well behaved in class and focused on her work.

8:40 Willie settles in to her desk at the start of the morning. The teacher begins her language arts program by having the children sit on the carpeted floor in front of her. The teacher begins reading a new story, "The Sun and The Sea", from a basal reader. The teacher introduces the story by asking the children, "What do you know about the sun?" The children respond with answers that start a discussion about their experiences with sunburn. Willie raises her hand but is not called. on. She then sits quietly without raising her hand but listening to the other children.

9:00 The teacher writes on the blackboard. "I like the sun because ___________. I like the sea because ________." The teacher and class read each sentence and she tells them they can put anything they want in the blank spaces. (This is for their journal writing.) She gives them instructions regarding what they need for their "stations" (see below). The teacher then asks a few children whether they want to go to computer or listening station today. Willie chooses the listening station.

9:03 The teacher lets the children leave their seated positions "by rows" to go to their assigned stations. Willie's first station is with the teacher at a small table with four other children. She chats quietly with a friend while the teacher assembles materials needed for the day's lesson.

9:05 The teacher writes "ai" and "aw" on a small chalk board and asks "Tell me the sound each makes." The children say the sounds together as a group. The teacher then writes "draw" on the board, saying "This word has a blend. Who wants to sound out the word?" Willie raises her hand and is selected by the teacher. She correctly sounds the word. "Give me a sentence with the word draw." Willie responds, "I draw on a piece of paper." The teacher praises her answers. The teacher then repeats the process with the other children. When finished, the teacher passes out workbooks and asks the children to turn to page 832. Willie looks bored during the transition time as the children get ready to work.

9:10 The children and the teacher read the instructions together. The workbook activities are related to the sound "aw." The children take turns reading sentences aloud from the workbook and are then asked to identify the "aw" sound word in the sentence, e.g., saw.

9:13 Willie reads her sentence with the word "yawn" and correctly answers questions from the teacher. The group then turns to another page in the workbook. The teacher says, "Look at Willie, look at how ready she is to work." The next exercise involves using words the children practiced for homework the previous night. The children select and circle one of four words to fill in blanks in different sentences.

9:22 The teacher says, "Let's have Willie do number 3." Willie reads the sentence "The sun___to be warm," then reads each optional word and chooses the correct word to be inserted, "seemed." Willie is generally attentive through the entire period listening quietly while other children have their turn to read.

9:25 The teacher collects the workbooks and marks them, praising the children for their good work and encouraging those who had some difficulty.

9:26 The teacher rings a small bell and instructs the children to go to their next station. Willie puts her pencil back in her desk and moves quietly to the table with the class aide. This group consists of a total of six children. The aide begins by saying, "We are going to read the story, "The Sun and the Sea," an African folk tale. The children read the story in round-robin fashion, each reading a paragraph aloud from the story. If a child has trouble, the aide asks him or her to read it again while helping to sound out the words. After children read, the aide asks questions related to the story — both factual and "why" questions. The children are actively involved in discussing the story, but Willie generally remains quiet though attentive. She volunteers some answers during this period.

9:35 Willie reads her section very well with little difficulty. She continues to take part in the group discussion of the story, raising her head for each question and responding when called on. Her answers are, however, typically a few words, often single word answers. Most other children give more elaborate answers.

9:41 Willie reads her next section, which consists of 5-6 sentences. She speaks well in a loud clear voice. She has some difficulty with a couple of words and the aide helps her.

9:44 The children finish the story and rest with their heads on the table. The aide then asks them if they like the story. (The aide seems to be trying to fill up the remaining time). This starts a discussion of the story — Willie sits quietly, but listens to the discussion.

9:47 The teacher again rings her bell and says, "Prepare for recess." The children return to their desks. The teacher asks "Who has to miss recess?" The children give the names of five children, one being Willie. (This is apparently for not bringing their homework to school, except for one child who has two instances of misbehavior during the morning.) Each child is given work to do for this period of time. Willie does a work sheet involving reading a short paragraph and answering questions about the order in which events happen in the story. The remaining children are dismissed by rows.

10:00 The children return from recess and sit at their desks. When they are settled down, the teacher instructs them to go to their next station. (Total transition time is under one minute.) Willie remains at her desk and writes in her journal using sentences previously written on the blackboard by the teacher.

10:16 Willie completes her writing assignment and shows her journal to the teacher , who praises her work.

10:22 Willie takes a puzzle to work with alone on the floor. She sits down near two children engaged in another activity. The three children talk quietly during this time.

10:25 The teacher rings her bell and instructs the children to go to their last station. Willie goes to the listening station (a small table at the side of the room). She selects an audio tape but has to ask the teacher for help deciding which side of the tape to put into the tape recorder. The teacher also has to help her untangle the earphones from a previous child and adjust the sound on the recorder. Willie places the tape in the machine and starts the recording. She has selected "Chicken Little." Willie follows the story in a book while listening to the tape—audio cues tell her when to turn the page. Willie appears intently engaged in the story but is primarily following the pictures.

10:38 Willie finishes the story and turns the tape over to listen to a second section, "Anna Banana and Me." She is not able to finish the second story, however.

10:48 The teacher rings her bell and instructs the children to return to their desks to prepare to go to lunch. Willie returns the tapes and books to their proper location and arranges the tape player and earphones. She then returns to her desk.

10:50 The children leave the room to go to lunch and then recess.

1:15 The teacher uses chains of 11 interlocking blocks handing the "train" to individual children and asking him/her to make two trains and count the blocks in each train. This is done to demonstrate subtraction and addition concepts, e.g., 3 and 8, 5 and 6, 7 and 4, 2 and 9. The teacher writes the different combinations produced by the students on the board.

1:24 The children return to their seats by rows and get out their workbooks. They work alone on two pages of subtraction problems. Willie helps a neighbor find the correct page and then begins to work quietly. She uses her fingers to solve the problems as do most children. Willie seems to have difficulty with the assignment and is probably at the lower end of the class in terms of speed.

1:50 The teacher rings her bell and tells the children to stop work. Willie has not finished the problems; she has two left at the bell. Most children had completed the assignment.

1:52 The children line up for a bathroom break and recess.

2:04 The children return to their seats. The teacher turns the lights off.

2:07 The lights are turned back on. The teacher hands out papers from yesterday on dinosaurs. Remainder of day spent on dinosaur activities.

2:30 The children leave the classroom for the day. *Willie goes to another classroom for the Chapter 1 Club.*

2:36 *The Chapter 1 Club begins. Willie sits with eight other first graders on a carpeted floor in front of an aide who is seated on a chair. The aide begins to hand out projects the children are working on based on the last book they read together. The children are hand-sewing 36"x18" American flags. Willie waits to receive her flag. Her flag is nearly done. While the children work on their flags, the aide asks questions about the flag and Betsy Ross. Willie helps two other children with their sewing because she has already finished most of her flag. The children will write two themes when their sewing activities are done — one about the flag and Betsy Ross and one about their sewing experience.*

3:05 *The Chapter 1 Club ends and Willie leaves for the day.*

Extended Time-B: Robert's Day

Summary of observations. Extended Time-B is located in a rich agricultural valley in the west that attracts large numbers of migrant workers from Mexico. The strategy consists of a summer program eight weeks in duration to "settled out" and summer migrant students. The summer program is run as a separate entity; however, it does reinforce academic skills taught during the year. Initially students are administered a needs assessment, which consists of student and parent interviews, teacher observations, and standardized tests. After that, instruction is much like that in the classroom during the year, with mornings devoted to the core subjects (reading, language arts, and math), using an English language immersion approach to language that consists of phonics, vocabulary, spelling, and reading. Math is taught from workbooks and emphasizes computational skills. Afternoons are spend in specialties such as art, music, or computers; once a week children practice swimming skills and once a week they take an educational field trip. Students also receive nutritional and medical services. In the WSD reproduced below, most of the key elements are represented and attention is paid to basic instruction.

Robert is a nine-year-old boy who completed third grade last month and is attending the summer migrant program this summer. This is also Robert's regular school, so he is a "settled out" migrant child. In this regard, Robert is similar to approximately one-half of the students receiving summer-migrant services in the U.S. Robert is a healthy, clean-cut looking child. His family moved to this community from Mexico two years ago. Robert is fully bilingual. On the day of the observation, Robert is wearing a white T-shirt with a bicycling design on the front and one sleeve, white elastic-waist shorts, iridescent green socks, and sneakers.

8:00 Robert and all of the other students in the migrant summer school arrive and have breakfast: cereal, milk, peach slices, and bread. After they finish breakfast, the students are allowed to play.

9:00 Academics begin. *Robert is working in his Spectrum Math workbook. The problems are addition of large numbers, with carrying.* (e.g. 158 + 69). Robert has difficulty with this particular problem, and has no hesitancy about what to do: he goes to the aide and asks for help. It becomes obvious that Robert's problem is with carrying, and the aide works a little more with Robert. By the end of the interaction, Robert seems to "have it" and returns to his seat to work additional problems.

In a few minutes, Robert is back at the aide's table. He has to wait in line for two minutes, which he does quietly, but then gets to ask his question. *The workbook has now given him a problem in multi-place subtraction with carrying. Again, Robert has trouble with the carrying.* The aide works patiently with him through two problems. Robert seems to get the point and see the similarity between carrying in addition and subtraction. He returns to his seat and works in his workbook.

10:02 Robert enters a conversation with two of his classmates, and works on math only intermittently for the next 8 minutes. The whole class seems to be winding down. The teacher is circulating among the students in the back, the aide has an increasingly long line of kids waiting for his assistance. The classroom is far from uncontrolled, but is no longer the model it was at 9:30.

10:10 The class takes a bathroom break. Well organized transition.

10:15 *The class goes to the library. Robert picks out a book, sits on the carpet and reads. After a while he changes books, goes to a table, and starts reading again.*

10:40 Following another extremely efficient transition, the class goes to the playground. Robert runs and swings and generally plays with his friends.

11:00 *The students return to a practice spelling test. Three of the students speak little English, so the aide takes them to the hall for more practice. This causes a brief disruption, but Robert sits patiently. The day's spelling words all involve a "short e." The students have to find the short "e" word in sentences read by the teacher and then spell it correctly.*

11:28 The teacher has a student explain the procedures for the next task to the entire class. This illustrates something which has seemed true all morning—that the students know a set of simple routines very well. *The task involves picking up a short reading assignment, reading it, picking up a set of questions, answering them on the paper, having the aide check the answers, and, if the student gets 100 percent, picking up a second short reading assignment and repeating the cycle. If students do not get 100 percent, they are to re-read the story and re-take the short quiz.*

Robert picks up his first story, reads, answers the questions, and stands in line to get his answers scored.

11:47 Robert seems to be having trouble with his reading. He is moving rapidly through the tasks, but is now well into his second attempt at the first story's questions. He doesn't ask any of his peers for help, but seems a little more anxious than before. He's tapping his foot.

11:53 *The class goes to lunch.* After lunch, the kids go back out to the playground: nice swings, several acres of lush grass, and a marked- off soccer field.

1:00 *The teacher reads a story (about eating worms) to the students and they seem to enjoy it.*

1:30 A transition between classes. There is a rotating set of experiences in the PM. *Today's class is painting.*

1:35 *Art class begins.* Robert, who sat in the front in the AM, is sitting in the back row. After having some problems with distributing materials, the teacher does a very interesting introduction to painting trees with water colors. *After an initial demonstration of tree-painting with water colors, the teacher tells the class that they will make two paintings, one for practice, and one to keep. The students are clearly enthused. Robert paints just the way the teacher had demonstrated: leaves first, then trunk and limbs, and finally sky. The sky requires a "wash" technique that was new to me, but certainly seemed to work for most of the kids.*

2:45 It's time to clean up, eat a snack, and prepare to go home. Again, Robert seems contentedly pleased with himself and his world.

3:00 School dismissed. Busses home.

Instructional time at sites Extended Time-A and Extended Time-B

The school day at site Extended Time-A (first grade) is nearly five hours (295 minutes), including 30 minutes for the after school Chapter 1 Club. Both students had reading/language arts and math during the regular school day. They each had science, and one had social studies. One had an elective, and the mean proportion of time used in non-instruction was 10 percent; one student worked through her recess.

The school day (also third grade) at Extended Time-B (the summer migrant program) is 285 minutes. This program may differ from other sites in that its intended instructional time is primarily in the morning, and electives and physical activities are provided in the afternoon. All three students had reading/language arts, and all three had math. The students also had electives, and one had seatwork. Non-instructional activities occupied, on average, 18 percent of the students' days.

Section III: Future Questions

Although we have developed rich narrative WSD descriptions, there is yet much information to be collected in order to complete the analysis of special strategies as they are experienced by WSD students. Two categories of information in particular will be the focus of the upcoming data collections efforts:

- Completing the QAIT, which serves as a valuable analytic tool to examine how the program implemented in the classroom varies from the intended program, and
- Describing the context of student experiences.

Completing the QAIT

Time was one of the first areas of the QAIT model that was addressed in WSD data collection and analysis. To enrich the data presented in this report, we hope to learn more about planned and actual time allocation and perhaps be able to identify patterns across schools or strategies. Among the questions we hope to answer with more data are questions about the ratio of time assigned to reading/language arts versus time for other subject areas. We also hope to learn more about the amount of time spent in non-instructional activities and whether our observations and published schedules continue to diverge. Also, we suspect that there are grade level differences in time allocations and will attempt to learn whether that hypothesis holds true.

Quality was addressed in the early WSD data collection in terms of examining coordination issues between regular classroom instruction and the special strategies in at least some programs. Further effort is needed to look at coordination more thoroughly and to examine systematically the overall quality of the curriculum and the presentation of lessons to students. Are teachers using examples, demonstrations, pictures and cognitive strategies such as advance organizers and memory strategies that help children to learn?

Appropriateness is an element of the model that requires some subjective judgments about the instruction received by students. Here we must use the data collection effort to see instruction from the student's perspective—is the work too hard, too easy, too slow, too fast? Moreover, some information must be obtained concerning student's prior or background knowledge. The incentive for students to learn rounds out the QAIT model and will be a focus of upcoming data collection as we seek to identify and assess the incentive structures created by teachers to engage and maintain the interest of students.

Describing the context of student experiences

While the QAIT focuses on the instructional dimension of the whole school day, the study takes an interest in students that goes beyond the content of instruction in order to understand the context of their instructional experiences. In this report, we have begun to examine the variety of personal, cultural, and instructional worlds of the WSD students by providing brief descriptions of the race/ethnicity, backgrounds, and skills of a sample of students and portraying some schools that demonstrate cultural diversity. This effort will continue in the upcoming data collection as we attempt to enrich our understanding of the students along the following dimensions.

- What are the students' *personal* talents, interests and ambitions for the future? What are their parents ambitions for them and how are these communicated? What interests do the students pursue outside school—sports, hobbies?

- What is the role of the *cultural diversity* of schools in students' lives? In particular, what is the experience of students in all African-American schools and schools that are mixed Hispanic and African-American? To what extent do schools adapt curricula to serve the needs of various race/ethnic groups?

- What is the role of the *special strategy* in affecting the social and behavioral performance of the WSD students? What dimensions of the strategy affect the personal development, behavior, and/or self-esteem of the students in the strategy or their families? (For example, how important are the one-on-one interactions provided by many of these strategies?)

Part II

Implementation of Special Strategies

by

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Introduction

Analyzing what factors facilitate or impede the implementation of special strategies is a central mission for this study. By the study's end two years hence, we will have a more complete picture of the life history of the special strategies, beginning with how and why the strategies were initiated (and the consequences of those early decisions) through full implementation and the implications for replicating the strategies elsewhere.

The collection of chapters in this part of the first year report addresses issues across time (that is, initiation and replication) and level (such as, school, staff, and external resources). Within each chapter, the types of special strategies—philosophical approach, schoolwide project, and adjunct program—are usually discussed separately, because the scope and magnitude of the intervention often influence implementation.

The preliminary findings discussed in these chapters are based upon initial site visits. The four, and sometimes five, additional visits to be made to these schools will provide additional data to illuminate and refine (or reject) our working hypotheses. To reinforce that our work is "in process," each chapter closes with a brief section outlining questions to be pursued in subsequent field work.

Initiation of the special strategy

Implementation issues start with an analysis of the initiation of the special strategy, because how a program begins may well influence its further implementation. Our preliminary understanding about how the special strategies got underway is discussed in Chapter Six. Among the working hypotheses proposed to date are the following:

- A special strategy is often chosen by administrators and teaching staff with little consideration of alternative educational options.
- Special strategies chosen tend to include additional funding for individual schools. However, the provision of such funds does not ensure a smooth start-up.

- Strong administrative leadership within the school greatly helps start-up. Furthermore, start-up proceeds more smoothly if, at the earliest possible moment, input from faculty and staff is obtained and applied.

- For philosophical approaches and some adjunct programs requiring fidelity to a pre-specified model, support from either model developers or high-quality technical assistance expedites start-up.

- Initially high rates of staff turnover, particularly in urban schools implementing philosophical approaches or schoolwide projects, is often positive to the extent it allows administrators to hire staff who support the innovation.

- Schools experiencing the gravest difficulties initiating special strategies usually display other serious problems such as severe fiscal constraints, racial tensions, and inadequate school management.

Additional field research will probe more fully the reasons for initiating projects, such as who the key decision makers were and what decisions were made. The extent to which it makes a difference whether the ideas for the special strategy came from within or outside of the school will also be pursued.

Factors affecting implementation

Once a program has begun operation in a school, multiple factors may influence how well it is implemented and may help explain the divergence between the intended and actual program students receive, as described in Chapter Four. Among the most important variables are school and staff, including the availability of qualified staff, the leadership of the principal, and school climate (discussed in Chapter Five). Why and how programs were selected for implementation in school is discussed in Chapter Six. Because special strategies often entail changes in staff behaviors and interactions, staff development is discussed in Chapter Seven. Following are a variety of external resources, including the district and state context, external consultants, and parents (Chapter Eight). Because of the interest in the roles of parents in schools generally (not only in not only in special strategies), parent involvement is discussed in more detail in Chapter Nine.

School and staffing resources

Not surprisingly, the factors that make for good schools also facilitate innovation and change. Preliminary findings highlight the importance of the leadership and management skills of the principal, a nurturing school culture, qualified staff, and organizational mechanisms to support school problem-solving. Among the school factors facilitating innovation, discussed in Chapter Five, are the following:

- Among the leadership and management skills needed by principals are commitment to the program, the ability to motivate staff, and the organizational skills to make operational changes. For philosophical approaches, the principal links the general guidelines to the school's instructional practice; in schoolwide projects, the principal provides the unifying vision for instructional reform.

- A positive nurturing environment for both students and staff facilitates the risk taking needed to alter attitudes and beliefs and to build staff cohesiveness during the change process. This factor, as with the one above, is especially important for philosophical strategies and schoolwide projects.

- All special strategies require the commitment and experience of qualified staff, particularly those strategies that require staff to make major changes in their day-to-day practice.

- Lastly, effective implementation appears to depend upon creating opportunities to plan for long-range change, to examine and solve problems as they arise, and to assess program progress.

Throughout the remaining site visits, the continuing influence of school and staffing variables will be examined, including the extent to which our working hypotheses are confirmed.

Staff development

Because the successful implementation of special strategies often calls for principals and teachers to operate in new ways, staff development is an important facet of our study. The initial site visits provided only limited information on staff development, so subsequent visits will examine this factor in more detail. Preliminary observations, discussed in Chapter Seven, include the following distinctions among the three major program types:

- The philosophical approaches—Sizer, Comer and Paideia—require that all staff have a common understanding of the model and can translate this vision into specific instructional practice.

- Ongoing staff development in the philosophical approaches is enhanced by accessibility to the model developers as well as by the presence of one or more "true believers" in the school who act as catalysts and guide the adaptations of general guidelines into day-to-day practice.

- Schoolwide projects also require that all staff be involved, although the content of staff development appears more likely to be created by internal school needs than imposed from outside. Major responsibility for the vision of the school rests with the principal who works with school staff on staff development topics.

- Among adjunct programs, staff development hinges on whether the special strategy requires fidelity to a particular instructional model. Reading Recovery, for example, requires extensive year-long training at a certified site. The extended day program, on the other hand, is an unrestrictive adjunct program initially requiring no special training.

Future site visits will explore further such topics as who receives staff development, what is covered (and who decides on content), why it is conducted, and how frequently it is provided. Its perceived value will also be examined.

External resources

Because schools operate within district and state contexts, it is particularly important to assess the roles of external parties in the implementation of special strategies. Also examined in Chapter Eight are the roles of external consultants and parents. Among the preliminary observations are the following:

- Philosophical approaches and schoolwide projects are facilitated not only by district encouragement and support for the programs but also by district support for school-based management. For philosophical approaches and schoolwide projects, especially, site-based management is central to the process of school change.

- Districts and states play a critical role in providing the additional financial resources needed to implement and maintain special strategies. All special strategies require some additional resources, although the range is quite wide. Conversely, ailing economies have adverse effects on the implementation of special strategies, including the hiring and retention of staff.

- The commitment of the state and district to staff development can play a key facilitating role in those special strategies dependent upon extensive staff development (such as philosophical approaches, some schoolwide projects, and such adjunct programs as Reading Recovery).

- Similarly, the accessibility of model developers and high quality technical assistance is of ongoing importance both for philosophical approaches and those strategies where fidelity to a model is paramount (such as Reading Recovery and Success for All).

- Support from parents and community organizations helps provide a bridge between the staff and the cultural milieu of the students that can enhance the successful implementation of the program.

Topics to be pursued in field work include the changing roles played by district and state school officials and by external consultants in providing enabling resources and imposing environmental constraints.

Parent involvement

Increasing parent involvement in schooling has gained momentum over the past few years, so that our study is concerned not only with the effects of parent involvement on the operation of special strategies but also with the success of special strategies in involving parents in schooling. Highlighted among the preliminary findings in Chapter Nine are the following:

- Schoolwide projects, along with Comer and Sizer schools, are the most likely to include parent involvement as a specific objective. Success for All also places priority on the involvement of parents in their children's schooling.

- The Comer schools and schoolwide projects encourage an expanded role for parents in school decision making. Collaborative efforts between parents and school staff are the hallmark of Comer schools.

- Among the factors that appear to influence the extent and effectiveness of parent involvement are the design of the program; school support in the form of personnel, money or other resources; school climate as reflected in a welcoming attitude toward parents; the appropriateness of parent seminars or presentations to parents' needs; and effectiveness in building leadership.

Subsequent site visits will continue to focus on the parents of children as they continue through school and will examine the role of parents in the schools overall as well as in relation to the special strategies.

Introduction to replication

Chapter Ten summarizes findings presented in Part II and introduces what appear to be critical factors to subsequent replication of special strategies in other settings. Among the preliminary observations central to replication are the following:

- Implementation issues vary with the intended magnitude and scope of the special strategy on the structure of the school and the content of instruction.

- The more complex the project, the longer the amount of time needed for it to become fully implemented. Across almost all special strategies, the aspect of schooling slowest to change is the content of the core curriculum.

- With the possible exception of some adjunct programs, all special strategies visited continue to evolve.

- Central to replication efforts is the systematic exploration of the preconditions necessary for implementation; the roles of such key staff as principals, faculty and parents; the explicit relationship between the special strategy and instructional methods and curriculum; and the extra tangible as well as hidden costs needed to implement the special strategies.

- High poverty schools share many challenges , whether in inner city or rural areas. They pose the greatest challenge to special strategies because of their large proportion of multiple-needs children and limited resources within their immediate areas.

- Generally speaking, the more urban the district, the more likely districts have access to resources and have the flexibility to change staff. Schools in small towns and rural areas appear to rely heavily on state and other external funds to initiate new efforts; they also seem more constrained than urban districts to change staff.

- Replication efforts need to take into account levels of school poverty and community resources. Very high-poverty schools in both inner city and rural areas enroll a larger proportion of multiple-needs children and often have more limited community resources than their more affluent counterparts.

Subsequent field work will examine not only the continuing implementation in the 25 schools among the 10 programs, but also implementation across other schools that operate representative programs. The expanded sample of schools will further inform our questions about what factors facilitate or impede progress.

Chapter Five

School-level Factors for Implementation

by
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The special strategies examined in this report range from incremental school improvements to broad attempts to restructure the existing school environment, culture and instructional paradigm. Nevertheless, these efforts share a common goal of seeking ways to improve education for disadvantaged children. To accomplish this goal requires a variety of resources—both tangible and intangible—that support what goes on in individual classrooms. This chapter addresses internal *school-level* characteristics and resources that affect implementation. External resources that support school-level implementation are discussed in Chapter Eight.

Preliminary findings from the initial site visits indicate the following are important school-level facilitating factors for implementation:

- The *leadership and management skills of the school principal*. The school leader must be committed to the program, be able to adequately motivate school staff and have the organizational skills needed to make the necessary operational changes (e.g., revised instructional schedules). This requirement is particularly important for the schoolwide and philosophical models. In the first case, the principal is the catalyst who provides the implementation "road map" for the rest of the school staff; in the second case, the philosophical models are externally developed and it is the role of the principal to determine how best to adapt general guidelines to the school's instructional practice. However, adjunct programs, especially CCC, require strong leadership as well for effective implementation.

- *School culture*. A positive nurturing environment—both for students and staff—is an important prerequisite for innovation and change. Efforts to alter attitudes and beliefs and build staff cohesiveness include these: the use of schoolwide facilitators and coordinators; regular staff meetings; school-level decision-making councils; and increased opportunities for program-specific staff development and team-building activities.

- *Meaningful, universally agreed upon goals*. Schools in which program goals were universally agreed upon were typically viewed as more successful.

- The *attention of school administrators to daily academic functions*. Schools in which the principal and staff were fully aware of the program's goals and requirements and saw that they were being faithfully implemented in classrooms for successful daily functioning tended to have well implemented special strategies.

- *Coordination of curricula and instruction*. Particularly in some adjunct programs, the "program" might be well implemented without producing significant overall improvements in students' academic life. In those sites where the principal and staff facilitated the program throughout the students' academic life, programs appeared to be operating more smoothly.

- *Recruitment of qualified staff*. Not surprisingly, good staff make for good implementation. This is particularly true in those models that require staff to make major changes in their day-to-day practice. In addition to hiring and retention decisions, the school management team can increase staff skills by motivating staff, creating a climate that supports innovation and learning by staff, and expanding opportunities for staff development.

- *Organizational mechanisms to support school problem-solving*. Effective implementation seems to depend upon expanded opportunities for teachers and administrators to critically examine problems, find solutions, and plan for long-range school changes. Such mechanisms include site-based management structures and regular staff meetings. The importance of such planning opportunities is especially great in the schoolwide and philosophical models that depend upon the creation of a *process* of change for their success.

The information presented here is largely impressionistic and should be considered only suggestive. Future site visits will focus on these topics in a more comprehensive manner.

Importance of school factors

Innovative approaches to effective education require a variety of school-level factors that foster and encourage implementation. Hawley (1976) defines this sort of school "adaptiveness" as continual multidirectional changes in behavior designed to ultimately fulfill the goal of educating children. Implementation is therefore a *process* of adaptation and one that often entails changes to a number of facets of an existing school system. Moreover, Hawley points out that innovations often fail because they are adopted but not implemented or incorporated as intended. In other words, despite the appearance of the *adoption* of a particular educational strategy, it is often difficult to observe the program in operation because of local characteristics that undermine its implementation. Berman and McLaughlin (1978) further suggest that successful implementation requires "mutual adaptation" where both the innovation itself and the school are modified during the process of change. This mutual adaptation also helps ensure successful outcomes as staff and administrators "buy into" the new program and make it part of their day-to-day operation.

The question of interest, then, is "What school factors support (or hinder) educational innovation?" From the early work of Edmonds (1979, 1982), through the efforts of subsequent researchers (Lightfoot, 1983; Cohen, 1983; Purkey & Smith, 1983; Wilson & Corcoran, 1988; McCormack-Larkin, 1985; Good & Brophy, 1986; Levine & Lezotte, 1990; Stringfield & Teddlie, 1991), there has emerged overlapping lists of identifiable school characteristics associated with the creation of effective schools. Good schools don't just happen by accident. By and large, the special strategy case studies echo these same themes, suggesting that the factors that make for good schools also facilitate innovation and change. That is, schools willing to adopt new educational strategies and that can successfully implement them are also schools that are doing a good job across the board.

As discussed in Chapter One, the school-level factors that create and sustain an environment in which high quality curricula and instruction are presented to children may be thought of as "macro-instructional." That is, these school variables operate at a level above that of the individual classroom teacher. Stringfield (1991) and Stringfield and Slavin (1991) have suggested a model of such macro-instructional characteristics of schools, referred to as "*MACRO*-QAIT," which includes five broad categories: Meaningful, universally understood goals; *A*ttention to daily academic functioning in all classes; *C*oordination of curricula and instruction across classes, programs and grades; *R*ecruitment and development of staff, including moving non-performing staff out of the school; and efficient *O*rganizing of school functioning to achieve the daily activities and overall goals of the school. The remainder of this section describes the importance of these facilitating factors for the implementation of the special educational strategies examined in this study. As previously noted, these data are preliminary and largely based on impressionistic evidence that emerged from the initial site visits to the selected study schools.

Meaningful and universally understood goals

The following discussion focuses on two school-level factors that help bring about meaningful and universally understood educational goals, 1) school leadership and management and 2) school culture.

Leadership and management

Research on the correlates of effective schools has placed considerable emphasis on the critical importance of school leadership and management—primarily residing with the principal and his or her management team—to create the climate needed to change the way schools educate children (David & Peterson, 1984; Cohen, 1988; Leithwood, 1990; Wilson & Corcoran, 1988). Such leadership includes both tangible and intangible components. Principals can support the creation of effective schools in a host of *tangible* ways including hiring qualified and energetic staff, influencing classroom instructional practice, assigning students to teachers, allocating time through scheduling decisions, acquiring resources and serving as the liaison between the school and the district and community. Principals can also have an *intangible* effect through the creation of a culture or climate that nurtures change and experimentation, motivates staff and emphasizes the primary importance of each child's individual needs.

The various case studies illustrate the nearly universal importance of the principal to the success or failure of the special strategies. This is especially apparent where it is possible to compare implementation of the same strategy in two different schools. In these instances, one of the common reasons given for differences in implementation is the leadership and management ability of the school principal. For example, the two extended-year schoolwide programs were considered to be different in their ability to provide an effective education to disadvantaged children. One of the core differences between these schools cited by the study team was the commitment of the principal to the success of the program and her skill as an instructional leader for the staff. One of the principals (in Extended Year Schoolwide-A) was hired after the program was initiated and never really supported it, thereby creating an atmosphere that has undermined implementation of the school reform initiative. The principal subsequently retired, leaving the school staff with their third principal in four years.

Two aspects of central leadership and management emerge from the case studies—commitment to the success of the particular reform strategy and the ability to motivate staff to support the change, and the management skills necessary to make the required organizational changes. With regard to the first factor, the principal *must be committed to the special strategy* and be able to convey this to his or her staff in a way that *motivates* them to make it work. Because innovation requires adaptation on the part of school staff it seems important to have a principal who is "an active learner" and able to convey this to his or her subordinates. For example, the two schools implementing the Success for All strategy were significantly different on this dimension. In one case (SFA-A), the principal was clearly the impetus for the program's adoption. She sought out staff of Johns Hopkins University to bring the program to her school, creatively found ways to adapt the program to her unique setting by tailoring certain features of the approach and involved her staff in the process during the very early stages of implementation. On the other hand, the principal of SFA-B was not as committed to the program. Moreover, she seems to be struggling to maintain day-to-day operations apart from the special strategy. The school is often chaotic and is characterized by a demoralized staff. In such a situation, it is hard to envision success for any efforts to improve school functioning.

The importance of senior-level commitment generally seems to vary in relation to the scope of the changes to be implemented. At one extreme, a simple adjunct program such as the extended-time Chapter 1 Club requires relatively small changes in the day-to-day operation of the school and does not demand fundamental behavioral changes on the part of the staff. Consequently, the leadership and motivational skills of the principal in this case appear to be of only limited importance in terms of the special strategy.

Next on a continuum of implementation complexity are adjunct programs that involve a portion of the entire school staff or depend on the skill and motivation of a few key actors. In this category are programs such as peer tutoring, CCC, and Reading Recovery. Each of these, of course, requires different levels of involvement by the senior school management team. But, the locus of change here is a portion of the overall school environment, and each is relatively prescriptive (i.e., the program to be implemented is well defined), thereby limiting the leadership challenge.

At the far extreme are programs that require broad school restructuring, whether as Chapter 1 schoolwide projects or as a set of guiding principles requiring a great deal of creativity to implement (i.e., Sizer, Comer and Paideia). Implementing programs in this category appears to demand strong leadership. The roles of instructional and administrative staff are redefined, teachers are asked to adopt new ways of dealing with children, and successful implementation typically requires pervasive changes affecting all areas of the school environment. As Lipsky (1971) has described, such fundamental changes can be quickly undermined by "street-level bureaucrats" who offer resistance to innovations that threaten their regular way of doing things.

Furthermore, some of the strategies—Sizer (Coalition for Essential Schools), Comer, and Paideia—are more philosophical paradigms than specific instructional approaches. Without a clear road map, schools are expected to implement large-scale reformations of existing operations and culture to change the way schools deal with children. Although this flexibility is purported to be one of the strengths of these models, successful implementation seems to depend largely on the ability of the school management team to determine how to apply the principles to its specific situation. Implementation, therefore, appears to be almost totally dependent on the leadership and management skills of the principal and the creativity, commitment and motivation of the staff.

For example, one of the reasons cited for the successful implementation of the Sizer program in Sizer-A and -B is the ability of the principal to establish an atmosphere encouraging innovation, teacher empowerment and openness for staff growth. The program calls for a shared management style in which the principal serves as a member of a group of adult learners rather than as a traditional administrator. Consequently, it takes a talented principal to make this program work.

Similarly, schoolwide projects attempt to make a large number of changes at once (e.g., reduced student-teacher ratio, reduced supplemental instruction, extended time) and to affect the education of all the students, not just those identified as Chapter 1. The success of such wholesale changes also appears to be highly dependent on the leadership and management ability of the administrative staff, and the skill and motivation of the instructional staff. For example, an examination of two extended-year schoolwide projects provided strong evidence for the importance of central leadership for successful implementation. One school (Extended Year Schoolwide-A), characterized by principal turnover and limited principal support, has evidenced limited implementation of the intended improvements to date.

In the two suburban/rural schoolwide projects, the principals have taken central responsibility for the development and dissemination of meaningful, universally understood goals. At the southwestern site (Schoolwide-C), the principal worked with the district's Chapter 1 coordinator, the state Chapter 1 director and the school's staff to create a unified project which met multiple federal reporting requirements plus the stated needs of the majority of the school's staff. Two years later, the principal continues to remind her staff that the goal of the school is to help all students learn how to read, do math, write and obtain other real-world skills.

In Schoolwide-D, the principal reported having listened for a full year to staff complaints that the school had too many pullout programs and a disjointed curriculum. As soon as schoolwide projects became an option, she and her assistant principal worked with the staff and the district's very supportive Chapter 1 director to develop a schoolwide project focusing on reading and math. Students' development in the areas of citizenship and creative talents, together with raising scores on the district's achievement tests, are the clearly understood goals of instruction at the school.

Some of the special strategies require skillful operational changes to support implementation. For example, CCC, the tutoring component of Success for All, peer tutoring and Reading Recovery require extensive scheduling changes and procedures to move children to and from their special classes without wasting a great deal of time on transition or causing disruption for other students. For example, the two CCC schools are markedly different in their ability to move students to and from the computer lab—at CCC-B, students routinely spend less than half their allotted CCC time in the computer lab and not all of their time in the lab at a terminal; at CCC-A, transitions are smooth and classes generally start on time.

School culture

Any organization, including a school, is characterized by shared values and beliefs that have an important effect on its operations. This common "culture," communicated informally to new staff members, establishes norms of expected behavior and defines work styles that are considered deviant or outside accepted "ways of doing things" (Blau & Meyer, 1971). In a school, such cultural factors include the overall institutional climate, staff expectations for student behavior and academic performance, roles of instructional and administrative staff and the level of faculty cohesion and collegiality.

Although generally agreed to be an important factor (Smith & O'Day, 1988; Levine & Lezotte, 1990), changing the culture of any organization is exceedingly difficult to achieve in a dramatic way in the short term. In fact, Kirst and Meister (1985) suggest that efforts to impose reforms from the outside are unlikely to alter the existing cultural milieu in which instruction occurs. Teachers, who work in largely isolated ways, are difficult to fuse into a cohesive entity. Consequently, the literature on effective schools (Joyce, Murphy, Showers, & Murphy, 1989; Fullan, 1990b; Heckman, 1987) has focused on mechanisms designed to provide increased opportunities for staff interaction, collaboration and development.

The initial site visits did not try to capture the many dimensions of a school's culture, nor was there a systematic attempt to report this information in the case studies. This limitation notwithstanding, it appears that the research teams were able to quickly discern a school's overall climate and its associated effect on students. Schools where visitors are treated with friendliness and warmth seem to be the same institutions that exhibited respect for the students and conveyed to all students a high regard for them as individuals. This includes not only high expectations for them academically, but also a clear message that adults care about them and are available to meet their needs. This type of positive nurturing environment does not just happen by itself. It requires work and attention from all of the staff—instructional, support and administrative—on an ongoing basis.

Schools with a positive climate also appear to be strong academically and seemed to be the most successful at implementing educational innovations. Conversely, those characterized by an atmosphere of anger and disrespect appear to be failing not only at the special strategy but also in terms of their overall educational program. A negative climate seems to affect the teachers, the administrators and the students and all appear to suffer as a result. It has been suggested by Berman and Gjelten (1984) that changes are harder to make in schools serving large numbers of disadvantaged children where day-to-day stress constrains the ability of staff to implement long-range changes. Overwhelmed by immediate problems, administrators often have little energy left over to address solutions that may have payoffs months, or even years, in the future.

Factors that seem to overcome this negative climate are related to efforts to increase collaboration and provide opportunities for staff development. This not only provides a forum to share ideas and improve needed staff skills, but by making individuals feel special and an integral part of the educational process, it fosters more positive attitudes. For example, two schools implementing Success for All were characterized in totally different ways by the site visit team. SFA-A, which seemed to be implementing the program well, had a cohesive staff who were striving hard to make the program, and the school in general, a good place for students to learn and a good place for staff to work. Conversely, SFA-B exhibited "a great deal of shouting by teachers and office staff. Yelling at the children seems to be the primary tool used to control them." Such hostility was not reserved for the students only, but also for anything from the outside. The special strategy was often criticized by staff as "a remedial program that was developed in an ivory tower and brought into poor, Black schools." In such an environment, it is hard to imagine finding fertile ground for the implementation of any innovation.

A similar distinction was found between two schoolwide programs. The more successfully implemented program appears to have gained immeasurably from the experience of being part of a special initiative. Their inclusion in a district-sponsored pilot project, according to the site visit team, has given the staff "a sense of family with common goals and structure" that has provided the motivation to do well, a commitment to the educational goals of the program, and a strong sense of cohesion among the staff.

Efforts to increase this level of commitment and sense of "togetherness" include the use of special schoolwide non-instructional staff ("facilitators" and "instructional coordinators") to provide support to teachers and to serve as a bridge both among staff and between instructional and administrative staff; regular staff meetings to increase opportunities for professional exchange and social interaction; school-level "decision-making councils" that help staff buy into the program and provide a vehicle for mutual adaptation between the school and the special strategy; and increased opportunities for staff development, especially "team building" activities.

The importance of changing school culture is particularly evident in models such as Comer and Sizer where the intent of these strategies is to fundamentally change the way staff view their roles and that of the students. To be successful, such strategies seem to require major changes in the way staff deal with each other and with students as well as in their perception of the place of school in the overall development of children. For example, the Comer model seeks to "expand the school walls" to bring parents and the larger community into the process of educating children. Implementation of such an expansive vision of education is, therefore, inherently dependent upon the ability of school staff to modify the existing culture of their respective institutions.

Attention to daily academic function

For quality learning to take place, school administrators must pay close attention to the instructional process, and this must be an ongoing function. Most importantly, the commitment to quality instruction must be visible and frequently conveyed to the staff.

The importance of the principal as an "instructional leader" is quite apparent in the two Reading Recovery sites and in the two schools implementing the CCC model. In each model, the two schools differ significantly in the extent of their program implementation, and one factor which seems to be associated with this difference is the involvement of the principal in the daily academics of the school.

Similarly, CCC-A has greatly benefited from principals its principal's active involvement in the instructional program including sitting in classrooms, observing or participating in instruction. The principal also provides frequent feedback to the instructional staff and the support needed to maintain a high degree of excellence.

Coordination of curricula and instruction

The critical issue in coordination is whether the student's academic days have been structured so that they make sense *to the students*. In organizations as complex as U.S. schools, this requires thoughtful coordination across programs and departments. Where we found such coordination (e.g., Reading Recovery-B, CCC-A, and Sizer-D), programs appeared to be functioning well.

The effect of a lack of coordination between regular classroom instruction and the Chapter 1 special strategies is particularly apparent in a number of the adjunct programs. Those that appear to be more successfully implemented have taken great strides to see that all of the instructional staff are aware of what is going on and, to the extent possible, that an effort is made to integrate the program into the regular classroom instruction. A good example is the two CCC sites. Both programs are run by paraprofessionals, but the schools are very different in the extent to which regular classroom teachers are involved in computer assisted instruction. In CCC-B, the classroom teachers are minimally involved in the program, and are generally uninterested in what takes place in the computer lab. By contrast, in CCC-A, all teachers regularly participate in whole-class CCC activities, and all teachers regularly receive printouts of each child's progress.

By their very nature, the schoolwide programs integrate Chapter 1 and regular classroom instruction. In fact, both principals and staff considered this to be one of the primary benefits of the schoolwide model; the elimination of pullout programs and the subsequent reduction in class size were both seen as a positive force for academic instruction. Further, the move to schoolwide status provided increased opportunities for grade-level planning and coordination, including the development of common instructional units and the ability to move students among classrooms to share their educational experiences.

An inability to achieve such coordination can also work to undermine implementation, as evidenced in two Sizer schools. In Sizer-D the ninth grade team implementing the program (consisting of four teachers) was assigned a cohort of 80 students and provided with three daily planning periods, one of which was allocated for team planning of activities and discussion of students' problems and progress. By contrast, Sizer-E is under such fiscal pressure that it was unable to provide either reduced class sizes or opportunities for shared planning by the instructional staff. In this school, coordination, when it happens, is a function of individual effort on the part of specific classroom teachers.

Recruitment and development of qualified staff

Successful implementation of educational innovations places demands of varying intensity and scope on the instructional staff. At one level, some of the special strategies require some or all the staff to learn new instructional and classroom management techniques. For example, Reading Recovery is a very prescribed instructional methodology requiring an intensive training regimen for selected teachers. At a more general level, most of the innovations require instructional staff (and sometimes support or administrative staff) to have certain characteristics to ensure successful implementation: high expectations for children, cultural sensitivity, flexibility, high energy level, an ability to see and understand each child's unique strengths, and motivation and commitment to the instructional goals of the particular program and the school in general.

To the extent that the principal can influence hiring and retention decisions, he or she can affect implementation by creating a team of highly qualified staff. In some schools, replacing staff has been a priority. For example, in the two extended-year schoolwide sites, all teachers and principals had to initially apply and be interviewed for the new program, and those who were unsupportive were allowed to transfer to other positions. Teachers and administrators were also asked to make a five-year commitment to the schools and the project. Similarly, efforts to use supportive teachers clearly distinguish the two Success for All schools. In SFA-A, unsupportive teachers were allowed to switch grade levels thereby creating a team of well motivated and committed teachers to implement the program. By contrast, staff in SFA-B were forced to accept the program leading to high staff turnover and discontent.

However, effective implementation more typically has to rely on five integrated courses of action:

- Strong leadership to motivate staff and to create a climate that supports innovation.
- Expanded opportunities for staff development and team building.
- Requiring staff to re-apply for positions (extended year schoolwide).
- Facilitating transfers or encouraging early retirement of staff who didn't buy into the program (urban and suburban/rural schoolwide, Paideia, and urban Sizer).
- Recruiting heavily and using the special strategy as a recruiting tool (Paideia, schoolwide, Sizer).

The first component, discussed earlier, can spur teachers to re-evaluate their performance and take positive steps to improve their skills. Such encouragement appears to be particularly important in those situations where teachers are challenged in ways that alter their traditional approaches to instruction. For example, Success for All with its emphasis on increased classroom heterogeneity may require teachers to become more attuned to individual student needs and learning styles, alter classroom management techniques, and take a more flexible approach to day-to-day programming. To support a smooth transition to this new program, administrative staff need to be skilled motivators and empathetic to the difficulty some staff may be experiencing. They also need to be aware of their staff's current skills so that they can appropriately target professional development activities.

Because innovations require staff to perform in ways for which they were not trained, efforts to provide staff development opportunities also seem to be an important factor facilitating effective implementation. This includes both formal training on specific skills and techniques (e.g., Reading Recovery) and informal training such as "modeling" by support staff (e.g., school- or district-based curriculum specialists), team-level meetings and other problem-solving mechanisms. Staff development is discussed in more depth in Chapter Seven.

Organization of school functions

The literature on implementation research (Weatherly & Lipsky, 1977; Presman & Wildavsky, 1973; Fullan, 1991; Scheirer, 1981; Elmore, 1982; Berman & McLaughlin, 1978; Berman, 1978) has generally found that an organization's administrative procedures can impede or distort planned changes to such an extent that it may be impossible for a program to produce its desired outcomes. To reform or improve schools, therefore, requires mechanisms to help teachers and administrators critically examine existing problems and find collective solutions to overcome shared concerns. Existing research seems to indicate this type of support depends on the following factors:

- *Adequate opportunities for collaborative planning* including the use of site-based management teams involving teachers, administrative staff, students and parents (David & Peterson, 1984). But, without careful controls such planning groups can too often end up worrying more about minor administrative concerns than the important things going on in classrooms (Levine & Lezotte, 1990; Wilson & Corcoran, 1988; Louis & Miles, 1990).

- *Appropriate skills* to participate in problem solving and planning teams. Effective planning requires teachers and administrators to adopt new, and often unfamiliar, roles. Innovations are therefore generally helped by providing support to staff to help them develop the needed skills.

- *Time* needed to conduct planning. Staff are generally overwhelmed by their day-to-day demands and may not be able, or willing, to commit the time needed to take part in school-wide activities (Johnson, 1990). Providing the time to interact with other faculty and administrators and share ideas is, therefore, critically important.

- *Authority* to make changes. To maintain commitment, and avoid frustration, school personnel must be given the authority needed to act on their own decisions (Louis & Miles, 1990).

Examples of such planning mechanisms are the extended year schoolwide programs that have as one of their cornerstones a Shared Decision Making Council made up of the school principal, parents and community members, teachers, a union representative and a member of the non-instructional staff, and the use of site-based decision-making in the Comer schools.

The use of more traditional planning groups also appears to play an important role. For example, some schoolwide programs schedule grade-level meetings and training sessions every nine weeks. Similarly, the Success for All programs utilize a school "facilitator" who holds weekly meetings with teachers at each grade level to discuss individual students, exchange ideas, and for staff development activities. In fact, the apparently more successful school implementing this model is reported to have had a much more active and capable facilitator who seems to be able to provide greater support to the instructional staff.

Again the importance of such operational mechanisms clearly varies among the different types of innovative strategies that are the subject of this study. Adjunct programs—computer assisted instruction, Reading Recovery, and peer tutoring—place fewer ongoing demands on the overall school staff and, as a consequence, require more limited mechanisms for day-to-day planning and collaboration than the more broad-based innovations. Initial planning can be quite complex, however, especially in the case of computer assisted instruction with its heavy up-front investment in equipment, software and facility modifications to put the program in place.

These demands notwithstanding, the less prescribed innovations such as schoolwide projects, Sizer, Comer and Paideia appear to require more institutionalized mechanisms for planning, for exchange of ideas, and for program evaluation. Because these strategies are so flexible, a collaborative process of monitoring implementation is needed to maintain sight of the original objectives. Within this context, planning serves to maintain staff motivation, ensure a shared vision of the program and provide opportunities for "mid-course corrections." For example, one of the strengths of the schoolwide projects is the objective of creating a process of change rather than pre-specified prescriptions for educational reform. As such, the creation of effective site-based management structures (e.g., school planning committees, grade-level teams) appears to be critical for successful implementation. More importantly, these mechanisms may also help instill a sense of empowerment, ownership and responsibility for the educational program that is at the foundation of the schoolwide projects.

Future questions

Future examination of the study sites should focus on the following questions:

- To what extent have schools institutionalized the special strategies? That is, are they able to sustain the program after the newness and the external involvement of the developers or funding is gone?

- To what extent are schools able to negotiate adaptations of the strategy?

- Are schools able to go beyond the original innovation?

- To what extent do school-level variables support or hinder such institutionalization and modification?

Chapter Six

Getting Started

by

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Describing the start-up of the special educational strategies in this study is reminiscent of the instructions traditionally provided in an introductory journalism class. Media orthodoxy calls for knowing who, what, where, when, and why? For this chapter, these questions are of interest:

- *Who* inaugurated the special strategy?
- *What* was the impetus?
- *Where* is the special project located?
- *When* did the program begin?
- *Why* was the strategy chosen?

Information on program start-up can be used in several ways. One reason for considering these issues is that the ways in which a particular effort is launched may affect program outcomes. Over time, we may be better able to interpret data on program success (or lack of it) if we understand the details of how an individual program was put into place. Further, schools interested in establishing similar strategies may benefit from information on program beginnings at these sites. It must, however, be noted at the outset of this chapter, that start-up has been only one of many topics covered in interviews with staff at both school and district levels. Many questions have not yet been answered, so this chapter is a preliminary consideration of start-up for special strategies in the Chapter 1 program.

This discussion of program start-up in the 25 schools in this study is organized around three broad categories of programs: philosophical approaches, schoolwide projects, and adjunct programs. Within this structure, we describe initial implementation for each school program, including information on location ("where"). We go on to discuss the age of the program ("when"), the problems which led to the need for a special strategy along with the impetus for choosing and launching the particular program ("what" and "why"), and the key actors with regard to program initiation ("who"). In some instances, we also examine local socioeconomic conditions because such factors often influence the decision to implement a new program and because they illuminate the setting in which the program must begin. This chapter focuses on *early* implementation. More detail—particularly on the school context, staff development, and parent involvement—appears in succeeding chapters of this report.

Our observations across the three strategy groups are summarized below:

- At every site, at least some discernible elements of the special strategy are in place.

- Currently available information indicates that, in general, administrators and teaching staff are unlikely to assess a wide range of educational strategies before choosing to inaugurate a special Chapter 1 strategy.

- Strategies, including some adjunct programs chosen by the schools in this study, tend to include additional funding for individual schools. However, the provision of such funds does not ensure a smooth start-up.

- For all strategies, program initiators designate improving student achievement as a primary program goal. They also emphasize the importance of increasing student self-esteem, decreasing absenteeism, and increasing post-secondary attendance. School administrative and teaching staffs are thoroughly aware of the problems in the very low-income communities in which many of these schools are located.

- In large urban areas, the impetus to implement a philosophical approach usually comes from within the schools. In smaller cities and towns, the influencing factors tend to be external—the state education agencies (SEAs), for example. For schoolwide projects, the impetus is reversed—small-town and rural principals are more likely to initiate such efforts than are urban principals.

- Whatever the impetus for initiating an innovative effort, start-up is greatly helped by strong administrative leadership within the school. In addition, start-up proceeds more smoothly if, at the earliest possible moment, input from faculty and staff is obtained and applied.

- A strategy may be successfully implemented even when it has been mandated by a local education agency (LEA) or by school administrators as long as faculty and staff input is sought and incorporated. Personnel at the service delivery level must choose to "own the program."

- For some special strategies—Sizer, Paideia, Comer, Reading Recovery, and computer-assisted instruction, proximity to or accessibility of model developers or high-quality technical assistance expedites start-up.

- Staff turnover, which may be high in urban schools with philosophically based or schoolwide projects, is often a positive outcome because administrators are able to hire staff who support the innovation. Rural and small-town schools may not experience such turnover—and may have more problems beginning a new program—because these localities typically provide few, if any, opportunities for teachers to transfer or to obtain other employment.

- For some special strategies–Reading Recovery and METRA tutoring, for example–staff development in the form of training must and does occur before a program begins. Gathering more detailed information on staff development at time of program initiation is a primary objective for site visits in 1992.

- Observable change in curriculum content—in the philosophy-based models and in the schoolwide projects—is typically not a key component of program initiation. Similarly, the implementation of an adjunct program is rarely reflected in the regular classroom.

- Schools experiencing the gravest difficulties initiating special strategies usually display other serious problems such as severe fiscal constraints, racial tensions, or inadequate management.

Philosophical approaches

Across the group of schools implementing philosophical approaches, there is little evidence that choices to implement such strategies result from careful needs assessments and thorough searches for best solutions. Rather, administrators and staff are thoroughly aware of school problems and issues, and an apparent solution—often accompanied by increased funding—presents itself. In some instances, a principal learns about a particular model. In others, the impetus is externally generated, usually by the SEA or the LEA. It is, however, important to note that seizing such an opportunity is not necessarily an inappropriate or adverse mode of operation. A good example is the Comer-A school, where the suggestion to adopt that educational strategy came from the LEA, but the principal and his faculty have embraced the Comer approach. Current evidence suggests that the strategy is a success, both externally, in terms of better test scores, and internally with regard to teacher and student satisfaction.

We summarize here what we observe about program start-up for this group of schools:

- In large urban areas, the impetus to implement a philosophical approach comes from within the school. Usually, the principal is the motivating force. In smaller cities and towns, the influencing factor is external—the SEA or the Coalition of Essential Schools. It is unlikely that such schools would choose to implement Sizer without the special funding available through participation in Re: Learning.

- While the availability of funds may influence a school's choice of an educational model, the provision of additional funds in and of itself does not ensure a smooth program launch.

- Most program initiators note that improving student achievement levels, by raising student scores on standardized tests and thus increasing Normal Curve Equivalent (NCE) gains, is an important goal. Other issues, such as increasing student self-esteem, decreasing absenteeism, and increasing post-secondary attendance, are also of primary importance.

- It is a plus in any school in terms of initial implementation and attitude of school personnel if school administrators and faculty are involved not only in the original choice and adoption of an educational model but also in decision-making roles once operations have begun.

- Ease of initiation, degree of implementation, and staff enthusiasm and support are highly affected by the administrative leadership in the individual school. A further example of this leadership in schools in large urban areas is energetic and successful outside fund-raising by principals.

- Start-up (and continuing operation) of these educational models seems to be facilitated by proximity to or accessibility of model developers to advise and support the implementers.

- Staff turnover in response to such substantive change may be a positive outcome in that school administrators can hire new staff who want to participate in the particular strategy.

- While, in most of these schools, there is evidence of initial effects on staff and student attitude and behavior of the various educational philosophies, it appears that measurable, observable change in curriculum content and in instructional methods is not usually a start-up activity.

- The schools presenting the most difficulties in inaugurating these educational strategies have other serious problems (severe fiscal constraints, desegregation issues, union conflicts) which permeate all school activities and choices.

Overview of schools

Of the nine schools in this group, five are Sizer schools, two are Paideia, and two are Comer. Seven of these nine schools are urban. Two of the Sizer schools are in the suburban/rural portion of this study. However, the municipalities in which these schools are located can be most accurately described as small-town America. During the 1980s, both of these towns experienced substantial change. Sizer-D, which is located 20 miles from a major state university, was once a blue collar and farming community. While it remains a predominantly blue collar town, it is metamorphosing into a bedroom community for faculty and administrative staff at the university. The Sizer-E town was once an affluent farm community with both mining and heavy industry as major employers. All three economic bases have been in recession since the early 1980s, and the town is losing population.

It is useful to note here that adopting and establishing an educational philosophy is a long-term process, which, over time, will involve the entire school and will affect the school's decision-making structure as well as curriculum content and the instructional methods employed by faculty. Translating a philosophy into a tangible curriculum and into concrete instructional practices is an undertaking of infinite complexity. None of the schools described here has completed this process. The Sizer-A school is the only one to have graduated a class of Sizer students, and, as of the 1990-1991 academic year, it was providing this type of education to 46 percent of the student body. The plan is that the Sizer program will apply to the entire school beginning in September 1991. The Sizer-B school focuses on an alternative program serving one-third of the ninth graders. Sizer-D also served only ninth graders in 1990-91, although it is expanding to the tenth grade in 1991-92. Sizer-C school serves 21 percent of its ninth and tenth graders. Sizer-E serves a small fraction of students at each grade level. The Paideia and Comer schools have implemented some aspects of these strategies, but, in no way are all aspects now in place. For example, both Paideia schools have implemented Paideia schoolwide only for language arts. Nevertheless, with two exceptions (Sizer-E and Comer-B), the schools in this group have plans and procedures for continuing with implementation.

Age of program

The oldest and the youngest programs in the philosophy-based cluster are the two Paideia schools: one has been operating since 1983, while the other began in 1989. Both Comer sites inaugurated their programs in 1985 although other schools in those LEAs had previously adopted the Comer strategy. Not surprisingly, four of the five Sizer schools embarked on their special strategies in 1988 after being recruited into the CES Re:Learning project. Two of these did not begin operation until the fall of 1990. Sizer-A launched its effort in 1986 after the principal attended a lecture by Ted Sizer and recognized "the only way to improve outcomes for our student population was to revamp everything we were doing."

Problems leading to special strategy adoption

The five Sizer high schools are either in low-income sections of large cities or in towns with declining economic bases, so they face the now commonplace problems of high absenteeism, high dropout rates, high retention rates, low achievement rates, and low student motivation. One of the small-town Sizer high schools also noted student alienation as a major issue; two of the urban Sizer high schools want to increase student attendance at post-secondary institutions. It is these problems that school administrators hope to address through application of the Sizer philosophy.

While the Paideia schools certainly face high absenteeism and low achievement in their populations, their reasons for choosing a philosophy-based educational strategy reflect Adler's goals for excellence in education: all children should have the same opportunities to learn and the same opportunities to become critical thinkers.

Although Comer-A serves the elementary grades, it must deal with the same problems identified by the urban Sizer secondary schools including high absenteeism, high retention rates, and low student achievement. This school is located in a particularly distressed, low-income, minority neighborhood, and its administrators and staff were floundering in the morass. LEA administrators suggested to the principal that he and his faculty adopt the Comer model as a means for addressing school problems.

Comer-B exhibits similar characteristics. A site visitor assessed this institution as "a decaying school in a decaying district in a decaying town." School administrators and faculty describe the neighborhood as extremely violent. The Comer strategy was implemented here as part of the SEA's response to court-ordered desegregation.

Impetus for choosing Sizer

By definition, a CES school is a Sizer school. However, Sizer-A chose the Sizer approach prior to joining the coalition. As also mentioned above, the principal was and is the prime mover and shaker in this effort. Notwithstanding, the school's faculty were involved in the decision to choose and implement the Sizer philosophy, and the high school has a School Restructuring Committee, chaired by a faculty member elected by the staff. The principal of Sizer-B led her faculty in joining Re:Learning, but that choice grew out of a faculty self-study and a restructuring to increase staff involvement in decision-making. In addition, both principals had LEA mandates—and continue to have LEA support—to formulate and initiate game plans to improve their schools. At both of these schools, the Sizer teaching teams now recruit and hire new or replacement faculty members. Sizer-A has experienced almost no staff turnover. There has been some turnover at Sizer-B, but it is unclear whether or not this shift in faculty is related to implementation of the special strategy. At both of these schools, faculty and students strongly support the choice of the Sizer strategy.

The other three Sizer high schools were recruited into CES by their SEAs. The principal at Sizer-C had studied with a colleague of Sizer so that he is a proponent of the approach. His faculty was not involved in the decision to join the coalition although teachers participating in the ninth and tenth grade programs volunteered for their current assignments. While this principal is attempting to obtain funding to include the entire ninth grade in the special program, he is retiring in the summer of 1991 which raises questions about future administrative commitment to the Sizer philosophy. Teachers not involved in the Sizer program express little, if any, support for the effort. Enrollment is declining at this school so there is general concern about a decrease in the number of faculty positions and individual concern about jobs.

The principal at Sizer-D is also leaving during the summer of 1991. While he publicly expresses support for the Sizer effort, teachers do not consider him to be supportive. Faculty members involved in the existing Sizer program volunteered for the assignment, and there has been "almost no turnover" in this group. There is a Project Steering Committee composed entirely of teachers, and, in interviews, about two-thirds of the faculty express strong backing for Sizer. Many of these individuals noted that being a CES school was "empowering" to teachers. However, declining enrollment is also in evidence here. About one-third of the faculty—all teachers who are not involved with implementing Sizer—are worried about keeping their jobs and are concerned that "the CES model costs too much."

As noted above, Sizer-E is in a town with grave economic problems, and the LEA has very serious fiscal troubles. The declining population has led to decreasing school enrollments, and a number of teachers have been laid off. Because there are no other jobs available, the faculties at all schools in this LEA tend to be opposed to any change that they fear could lead to more unemployment. Some teachers at this high school feel that they were "force fed" Sizer by the former superintendent who advocated and attempted to implement the Sizer philosophy as well as some other instructional methods such as mastery learning. The new superintendent sees "Sizer as a frill... but, it's money." Sizer-E may well be an example of an uncompleted top-down implementation strategy. Had the original superintendent remained with the LEA, he might have expended some effort to engage faculty and encourage them to at least explore the Sizer approach.

A final point about the five Sizer high schools is that principals of Sizer-A and -B have actively pursued and acquired funds in addition to the monies provided by CES. While fiscal problems may not be as severe at these two schools, there have been internal-to-the-school efforts to acquire funds particularly for staff development activities. Staff persons at all five Sizer schools have attended training seminars at Brown University, but staff from the Sizer-A and -B schools have maintained particularly close ties with Brown and assist university staff with various training activities.

Impetus for choosing Paideia

The principals at both Paideia schools learned about the Paideia philosophy and then gained the support of their faculties to implement Paideia precepts in their schools. At Paideia-A, the initiating principal is now an LEA administrator; the new principal, however, is assiduously committed to the

Paideia approach. In fact, this second principal did not renew contracts of uncertified teachers because she believes "not obtaining formal certification shows a lack of dedication to the profession." Within the past two years, a 60 percent turnover in staff has resulted in the entire school faculty being firm advocates of Paideia. There is also strong LEA support for the Paideia program. Although this school contains the longest-running, philosophy-based program, both the principal and the coordinator note that "the didactic and coaching elements of the Paideia model need more work at our school."

Since the first year of the program, the school has received substantial funding from a local bank. These funds have allowed teachers to attend summer training sessions at St. John's College in New Mexico. Faculty from a local, nationally recognized university are integrally involved in developing and implementing Paideia at this school. This university also houses the institute which developed the Paideia approach.

The principal and her coordinator who initiated Paideia at Paideia-B have expended substantial effort writing and winning grants to obtain special LEA funds as well as monies from the SEA. These dollars have been key to beginning the Paideia program here. As of this writing, the school cannot expand beyond language arts because the state has a revenue shortfall so that the SEA, which provides the bulk of educational dollars in this state, is cutting LEA budgets. There is limited LEA support for Paideia and, apparently, no support from the local board of education. There is, however, considerable support by and involvement on the part of staff from the local state university.

The principal and coordinator admit that "the staff does not yet own Paideia." Nonetheless, most of the faculty rate Paideia as a positive program and experience. One reason for this affirmative response is a 25 percent turnover in faculty—some teachers wanted out, others wanted in. Both the principal and coordinator see this change as positive—in the short term because implementation moved more quickly and, for the long term, because "the faculty is more committed now."

Impetus for choosing Comer

Comer-A school is in an LEA that was among the first to implement the Comer strategy. As noted earlier, this school adopted Comer at the urging of the LEA. However, despite an initial top-down implementation, school administrators and faculty are wholly committed to Comer and consider the strategy a "real success." Like the two Paideia schools, this elementary school receives considerable advice and academic support from faculty at a nearby, internationally known university. The principal reports high staff turnovers during the first few years after Comer implementation began. However, he sees this staff change as a plus because individuals who were "not committed to Comer" chose to leave the school, and he was able to hire staff who support this approach. Despite the proximity of the model's developer at the university, this Comer school has not obtained any funds from that source. Its budget is entirely supported by the SEA and the LEA. This LEA, like many others, faces severe fiscal constraints, and LEA cutbacks could result in layoffs. Despite faculty concern about LEA finances and potential layoffs, staff morale and commitment are high.

As pointed out above, Comer-B was told by its SEA to adopt and implement the Comer model. All of the elementary schools in this LEA are Comer because the SEA chose that strategy as part of its approach to issues and problems stemming from court-ordered desegregation. There is some LEA support for this choice, but there is very little support within the school. Staff morale is extremely low. The LEA has formidable fiscal difficulties as well as conflicts with the teachers' union. Comer-B appears to be an archetypal example of top-down implementation by an external source where little or no input was obtained from building administrators and staff.

Schoolwide projects

A summation of observations on schoolwide projects is not substantially different from our synopsis of start-up for philosophical approaches. School administrators and their faculties tend to be well aware of school problems and issues, and, at least in urban areas, solutions appear on the horizon, and decisions are made to seize the day. For example, with regard to the four urban schoolwide programs, the schools were asked by their LEAs to implement such efforts. Increased funding was part and parcel of the invitation to participate. Interestingly, in a reversal of what we observed in the philosophy-based schools, principals conceived of and initiated the small-town and rural schoolwide programs. Also, the non-urban principals actively pursue additional funding. Primary objectives are improving student achievement levels, raising self-esteem of individual students, improving attendance, lowering student-teacher ratios, and reducing retention rates. Once again, start-up moves more smoothly and implementation more rapidly if school administrators and faculty are involved in choosing and adopting the new educational strategy.[1]

Three other comments about philosophy-based schools apply to schoolwide projects:

- High initial rates of staff turnover—in response to educational innovation—may be positive outcomes because administrators can employ new staff who support the innovation.

- Ease of start-up, degree of implementation, and staff commitment are substantially affected by the school's administrative leadership. Two of the schoolwide principals are strong personalities who are not well respected or well liked by their faculties. This negativity is reflected in school operations and the degree to which the special strategies have been implemented.

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[1] Success for All (SFA) operates in schoolwide projects, so some of the startup issues discussed in this section also apply to SFA. However, similar to the adjunct special strategies, SFA is a highly prescriptive educational approach and is more easily discussed in the next section of this chapter.

- All six schools have in place many elements of their schoolwide projects. However, at this point in time, the complementary changes in curricula and instructional methods are not as evident and, in some schools, have not yet begun.

Finally, it should be noted that the four schools that seem to have impressive elements of their schoolwide programs in place also have considerably increased funding levels. Even at Extended Year Schoolwide-A where some faculty are highly critical of the principal, many program activities are underway. That school also has more funds than prior to its designation as a schoolwide project. The one schoolwide project where very little appears to be happening or changing is Schoolwide-D which is located in the town with severe racial frictions. While such issues cannot be ignored, it is only reasonable to point out that this school does not possess the resources evident in the other five schoolwide efforts.

Overview of schools

There are six schoolwide projects among the schools in the special strategies study. Four of these schools are urban; two schoolwide projects are in the suburban/rural sample—one is in a southwestern village. The other is in a small southern town. Five of the six have extended year programs. All of these institutions are elementary schools.

The earlier discussion of philosophical approaches notes the complexities and difficulties of adopting and establishing educational models that require sweeping changes across school administration, curricula, and instructional practices. Starting up schoolwide projects is equally complex and arduous. Schoolwide projects primarily represent modifications in management style (such as decision-making shared by administrators, faculty, and parents), educational strategy structure (reduced pullout, for example), and classroom organization (such as smaller class size). Nevertheless, plans for schoolwide projects usually include changes in curricula and instructional methods. Establishing a schoolwide project is a process which, by definition, involves the entire school and which, like Rome, cannot be completed in a day.

Age of program

Schoolwides-A and -B initiated their projects in 1988; the extended-year schoolwides began in 1987. Schoolwides-C and -D commenced in 1989. Schoolwide projects became more popular in 1988 after the Hawkins-Stafford Amendments eliminated the need for LEAs and SEAs to provide matching funds for such schools. The extended-year schoolwide projects precede Hawkins-Stafford because they are part of an LEA-launched special project which has foundation funding as well as state and federal funds.

Problems leading to special strategy adoption

Prior to their designation as schoolwide projects, all six of these schools had high rates of absenteeism and very low student scores on standardized tests. In the extended-year schoolwides, student scores had never risen above the fiftieth percentile. One consequence of these problems is low student self-esteem. Administrators and staff at every school in this group named absenteeism, low test scores, and low self-esteem as problems to be addressed and resolved through their schoolwide educational strategies.

All of the schools are in very poor neighborhoods or communities. Schoolwide-B draws children from a public housing project considered one of the worst in the city. In Schoolwide-C, 98 percent of the students qualify for free or reduced price school meals. In five of the six communities, a majority of families are headed by single female parents. These schools serve high proportions of families with one or more members who are substance abusers. Other forms of abuse are also prevalent. Extended Year Schoolwide-B is located in gang territory.

In response to these problems, the six schools listed as goals: raising test scores, reducing class size, and socializing children. Schoolwide-C and -D principals specifically mentioned eliminating pullout programs. Administrators at Schoolwide-A report that their focus is on prevention and remediation. Schoolwide-B lists as goals increasing numbers of students reading at or above grade level and making the school "a safe place. . . ." Schoolwide-C includes in its goals improving teaching skills and individualizing instruction.

Impetus for choosing Schoolwide

Schoolwides-A and -B are in an LEA that promotes schoolwide projects. Both schools were asked by the LEA and central Chapter 1 administration to implement such projects. In both cases, principals took the idea to their faculties who supported the change. Working together, school administrators and faculties chose effective instruction. One school also uses cooperative learning and assertive discipline. Both have extended year programs. There has been staff turnover at both schools, and both principals see the turnover as positive because "nay-sayers transferred to other schools," and "now, we have a team." At one of these schools, the principal took transfer forms to the first faculty meeting to underscore her commitment to the schoolwide project and to emphasize the need for faculty commitment to a schoolwide project. Both schools have vigorous and committed staffs to complement the energetic leadership of their principals. Further, because the LEA has chosen to concentrate its Chapter 1 funds on schoolwide projects, these schools have had increased levels of funding with which to employ additional staff persons and to purchase needed teaching materials.

The two extended-year schoolwide projects are part of an LEA-initiated program which focuses resources on structural change and curricular modification in the district's worst-performing minority schools. Schools were designated for participation, and all principals and teachers had to apply for positions. Staff and administrators were asked to make five-year commitments to the district program. Because of this application process, staff turnover is very low at these schools, and there is considerable staff pride in being part of the district-wide project. Both principals are strong individuals, and one (Extended Year-B) is a well respected instructional leader.

The district program is very well funded combining state and district monies with Chapter 1 funds and private, particularly foundation, dollars. There is some concern that a current LEA shortfall may affect the level of support services provided to students in these schools.

At Schoolwides-C and -D, the principals were the primary movers in initiating schoolwide projects. The similarities, however, extend only to this factor.

Schoolwide-D is part of a large county which includes a medium-sized city. Court-ordered desegregation guidelines mandated appointment of a white principal (when the black principal retired) as well as eight white teachers at a school where 98 percent of the student body and most of the teachers are black. The assistant principal is black, reflecting an LEA decision about ethnic composition of school leadership teams. Some faculty members were involved in choosing, planning for, and starting up the schoolwide project, but the majority of the staff see the schoolwide effort as the principal's program and are uninvolved except to support the goal of reducing class size.

Schoolwide-C, on the other hand, shows positive change on almost every front. The principal is generally liked and well respected—in fact, the community asked that she come to the school. Absenteeism has dropped; test scores have risen with enormous NCE gains. Class size has been greatly reduced; pullout is virtually eliminated. Full-time, bilingual aides are in first grade classrooms, and teachers are "taking responsibility for their students' academic progress."

There has been high staff turnover—50 percent of the faculty left during the first year. As has been described in other locations, the principal encouraged non-supportive staff to leave and has hired new staff who are committed to the new regime.

This schoolwide project is well funded—particularly for a rural school, combining SEA, LEA, Chapter 1, and various ethnically designated funds. This project had a very fast start-up, and school staff succeeded in quickly getting pieces in place because of the principal and her skill in soliciting substantial help from the state and the regional Chapter 1 Technical Assistance Center.

Adjunct programs

Adjunct special strategies range from broadly based efforts, such as Success for All, through combination programs—a three-pronged tutoring effort plus precision teaching plus Chapter-1-only first grade classrooms, to traditional pullout programs such as highly structured, para-professional tutoring.

However, six of the ten programs employ pullout to serve Chapter 1 students. Like the schools described above, schools using adjunct programs have not completed rigorous needs assessments or comprehensive studies of available educational programs. Often, a local issue—faculty criticism of pullout or a feeling that aides are underutilized—is the motivation for adopting a particular educational strategy.

Most adjunct programs are discrete efforts and require fewer resources, including less time, to get underway as compared with philosophy-based models and schoolwide projects. More costly interventions, described below, include Success for All, Reading Recovery, and computer-assisted instruction.

Other summary comments about adjunct special strategies follow:

- Unlike the philosophy-based schools and schoolwide projects, across the ten adjunct schools, there is no discernible pattern—with regard to urban/rural status, school size, or type of intervention—in impetus for program initiation. Impetus for six of the ten projects was internal to the school.

- In the Success for All school which was chosen as a pilot project, there is widespread faculty dissatisfaction and a lower degree of implementation than in the other SFA school where the principal and staff chose this approach. This situation is similar to our observations for philosophical approaches and schoolwide projects where faculty participation in choosing and planning extensive interventions facilitates program start-up.

- The primary goal of adjunct programs is to increase student achievement, particularly raising student scores on standardized tests to improve NCE gains. A secondary objective in some locales is to better use the time and skills of Chapter 1 aides who are already on the payroll.

- Similar to the results for the other two groups of schools, ease of start-up and staff support are significantly affected by the administrative leadership in an individual school. One reflection of such leadership and support is principals handling scheduling to minimize disruption to regular classroom instruction.

- For some interventions, Reading Recovery and Computer Corporation Curriculum programs, for example, proximity to or accessibility of technical assistance expedites program start-up, day-to-day operations, and staff satisfaction with the intervention.

- In general, adjunct programs are not initiated to coordinate with regular classroom instruction.

The ten schools in this group can truly be described as all over the map. To make this section more readable, descriptions appear by pairs of schools operating similar adjunct programs.

Success for All

Both Success for All (SFA) schools are urban. SFA-B, serving children in pre-kindergarten through fifth grade, was selected as a pilot school by the local university where faculty developed SFA. SFA-A, also serving kindergarten through fifth, contacted the university and volunteered for SFA. Both programs began in 1988.

SFA-B has the lowest test scores in the city and is in Chapter 1 school improvement. It is located "in the projects," and 95 percent of its students are eligible for free school meals. It faces the by-now-commonplace urban problems of high absenteeism, high retention rates, and low achievement. It is these problems that SFA is designed to address for children in kindergarten through third grade.

SFA-B carried with it large foundation funds which were highly welcomed at that inner-city school. It is a very structured program, and some teachers at SFA-B feel it is too restrictive. It appears that some pieces of SFA are not applied because of this teacher reaction. Nevertheless, faculty point out that SFA seems to raise self-esteem and achievement levels of low-achieving children. The principal is newly appointed and is "reserving judgment."

SFA-A is located in an aging blue-collar neighborhood now heavily populated by recent Asian immigrants, so the school has a large limited-English-speaking population. The faculty-set goal for this school is that all students reach third grade on time and on grade level. Further, faculty and administrators want to modify direct instructional practices to improve student success for children in kindergarten through third grade. Another goal is reducing class size.

Teachers at SFA-A have somewhat modified SFA so the program meets the needs of the school's primarily Asian population. A "transitional" first grade was added to help children having problems adjusting to school; also, one-to-one, pullout tutoring helps children with specific learning problems.

Before SFA was initiated, teachers who did not wish to use this approach were given opportunities to transfer to positions in the upper grades or to other schools. Staff who are using SFA have chosen to do so. Faculty here also note the program raises self-esteem for low achievers, and they "like the process."

Reading Recovery

Both Reading Recovery (RR) programs are in elementary schools containing grades kindergarten through fifth. The developers of RR require that instructors be specially trained at designated training centers. Also, because of the intensity of the approach, an RR intervention can serve only a limited number of children each year. This combination of factors means that RR is an expensive program to operate.

RR-A is in a state where Reading Recovery has become a dominant program because the state board of education and the state legislature have mandated and funded this approach. Also, the state's major public university operates a national RR training program. The LEA, school administrators, and faculty support the application of RR, repeatedly stating its effectiveness. RR has been used in this school since 1985 and serves about 12 first graders each year.

The Midwestern town in which RR-A is located is economically depressed and losing population. The school, where 20 percent of the student body is composed of minorities, has 76 percent of its students eligible for free or reduced-price school meals.

The RR-B school has 49 percent of its student body eligible for free or reduced-price school breakfast and lunch. Its RR program served 47 children during the 1990-1991 school year. The target population is "the poorest readers in the class."

One of the RR instructors is a teacher-leader and can spend only three days each week with her RR students. This schedule—which does not conform with RR specifications—led to some friction between the school and the Midwestern training site and threats of withdrawal of certification. This crisis has apparently been averted and has not diminished the school's enthusiasm for RR. Classroom observations, however, did not uncover instances of coordination of RR with standard classroom instruction at either site.

Computer Curriculum Corporation programs

The two computer-assisted instructional programs in this study both use materials developed by the Computer Curriculum Corporation (CCC). CCC-B serves children in grades kindergarten through fifth; the CCC-A school serves grades three through five. Like the RR program, computer-assisted instruction is at least initially expensive in that a school must make a significant investment in computer hardware and software.

CCC-B launched CCC in response to an SEA mandate which tied state compensatory education dollars to increases in standardized test scores. CCC is a pullout program at school B, funded with monies from the state's compensatory education fund. Classroom teachers are not involved with CCC, and there is some concern about differences in lesson sequencing. Faculty genuinely support the program and have high praise for the CCC proctor. Teachers say that CCC is raising children's self-esteem and self-confidence by providing extra time for students who need this time and by giving children individual attention and immediate feedback.

CCC-A operates in a schoolwide project and is one of a number of district-wide changes that have been put in place by an active and progressive LEA. The district has a lengthy and well-documented educational philosophy including operating principles. There are, however, separate objectives for different actors and for different programs. Two goals seem to apply to CCC: teachers are to effectively utilize computer technology; and the schools are to help students develop positive self-esteem as learners and as persons.

Some teachers use CCC materials in their classrooms and all teachers accompany their students to the computer lab. In interviews, faculty members expressed strong support for CCC because of "continuous feedback to each student and to teachers." They also said CCC reinforces classroom teaching and builds student self-esteem by providing positive reinforcement to individual students. School administrators and faculty also emphasized the importance of helping their students become computer-literate. Weekly CCC reports are used to assess student performance. CCC is district-wide so that all students are served.

The CCC-A school is in a small town in a sparsely populated agricultural area. The area is very poor, with a high rate of transience. Virtually all students qualify for free or reduced-price school breakfast and lunch. The LEA has aggressively pursued a variety of funding sources to pay for CCC and its other innovations. Funding sources include Chapter 1, state compensatory education, migrant education, and bilingual education.

Tutoring

One tutoring program is in a small town which can be accurately described as middle America. The school is in a middle class neighborhood that is showing some signs of deterioration. The student body is 20 percent minority. About one-quarter of the students qualify for free or reduced-price school breakfast and lunch. About 60 percent of eligible students are served.

This tutoring program, like the Tutoring-B effort described below, has as a primary goal achieving NCE gains. Nevertheless, the LEA emphasizes its commitment to "providing supplemental, one-on-one instruction to students who need help to achieve or improve basic skills in reading or math." The LEA uses METRA, a copyrighted, structured tutoring program developed in the 1970s. Another school district in the state had shown substantial gains through METRA. That success, combined with the economics of METRA—employment of para-professionals rather than certified teachers—influenced the LEA decision to go this route. The hope was to improve standardized test scores and to serve more children. All Chapter 1 monies are used for METRA.

The second tutoring program is in an elementary school in a small, white town in a mountain state—again, this location is very much a part of small-town America. The school is in a lower middle class neighborhood. About 20 percent of the student body are eligible for free or reduced-price school meals. All eligible children are served. Only Chapter 1 funds are used to support the program. This program's primary goal is raising student achievement as measured by NCE gains.

This program, which was implemented in 1990, combines several tutoring modes with precision teaching, separate Chapter 1 classrooms for first graders, and listening stations for Chapter 1 students in grades one through five. Tutoring methods include classwide peer tutoring in first grade; cross-age peer tutoring for second and fifth graders; and traditional pullout, one-to-one tutoring by para-professionals for third and fourth graders. The program, which uses a variety of published materials, was developed by the Chapter 1 coordinator and staff from the large state university located in this town.

One impetus for this program was meeting classroom teacher requests to minimize pullout. Also, central administrators felt that they were employing "a lot of aides with not a lot to do."

Peer tutoring is extremely popular with both first grade teachers and their students. Teachers report that this approach "keeps kids focused." They cite the repetitiveness as a plus for lower achievers and emphasize their appreciation for "the cooperative, unintimidating nature of peer tutoring."

Extended time programs

The final two adjunct programs are both located in the western United States. Extended Time-A is in an elementary school in a village in a western state. This agricultural community is very poor, and the school has high absenteeism and a high rate of transience. Teachers and aides in the informal extended day program—which combines academic instruction and crafts—focus on helping children to enjoy school so that they will be more enthusiastic about attending school more regularly.

Since 1988, the school has used its Chapter 1 allotment to operate an after school Chapter 1 club for about 50 percent of the Chapter 1 eligible children in kindergarten through third grade. The club's goals are to develop language (reading, speaking, writing) skills through concentrated reading instruction and to expose children to a broader range of literature. This school-developed program was created to make better use of limited funds which have traditionally been used to employ "a lot of aides" whom the principal believes are underutilized. Classroom teachers are positive about the "enrichment" provided by the Chapter 1 club and believe it raises self-esteem. They do not consider it an academic intervention, and coordination between the Chapter 1 club and the regular classroom is limited.

The final adjunct program, Extended Time-B, is a summer migrant project in a small town in a mountain state. This program inaugurated in 1990 uses Chapter 1 funds and migrant monies. In addition, high-tech industry in the area contributes handsomely to the LEA. The target population is the children, from kindergarten age through grade twelve, of migrant farm workers. These children attend a summer program.

Similar to the Chapter 1 Club described above, a goal here is to help students enjoy school so they will attend more regularly and will remain in school. Another primary goal is to increase mastery of basic skills, specifically English language and mathematics. The instructional model is based on the curricula and instructional practices used by classroom teachers during the school year.

The school principal, who was largely responsible for developing the program, reports that informal interviews with students and their parents have produced positive feedback from both groups.

Questions for the future

Beginning in the spring of 1992, site teams will explore several start-up issues during interviews with district and school administrators, faculty, and other staff. Continuing issues on program start-up include the following:

- *Clear identification of the availability, amount, and uses of additional, particularly external, resources.* It appears from our limited information that many districts and some schools have used non-Chapter 1 funds to implement their special strategies. While access to additional funding does not ensure smooth program initiation, the mere existence of such monies may be a primary impetus for change.

- *More complete information on staff development and training at the time special educational strategies are initiated.* We have observed the importance of involving faculty and staff in program planning and initiation. We do not have a thorough understanding of the activities, materials, and procedures school and district administrators applied to obtain staff commitment.

- *More comprehensive descriptions of decision-making processes at both district and school levels.* In general, we can identify program initiators, but we do not have a clear picture of the specific decisions to initiate special strategies, nor can we explicate the processes through which these decisions are made. The locus of administrative responsibility for such decisions most likely affects at least the perception of success or failure of initial implementation. Furthermore, we want additional information on the extent to which other alternatives were or were not considered.

- *A better understanding of the general effects of a range of externalities.* We have noted that most of the CES schools in the Special Strategies Studies adopted the Sizer goals and philosophy when they were recruited into the Re:Learning project. It seems likely that other externalities influenced LEAs or schools with regard to choosing their special Chapter 1 strategies. For example, from what source(s) does an LEA learn about METRA or cross-age tutoring or CCC?

Chapter Seven

Staff Development

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As discussed in Chapter Five, well trained and supportive staff are one of the key factors associated with successful implementation of innovative programs for educating disadvantaged children. Many of the special strategies require teachers, and sometimes other staff, to operate in unaccustomed ways. Typically, these individuals are not trained to take on these new roles and, as a consequence, they require varying degrees of staff development for proper implementation (Smith & O'Day, 1988).

This chapter examines the need for such training. The initial site visits provided limited information on this aspect of implementation, but future visits will examine this issue in greater depth and in a more systematic way. Preliminary findings to date include the following:

- The *philosophical models*—Sizer, Comer, and Paideia—require that *all* staff have a common understanding of the model and the ability to translate these often general principles into instructional practice. This seems to require extensive and ongoing staff development activities and, in the case of Paideia, requires training in both instructional method and content.

- Unlike the externally developed philosophical models, the *schoolwide projects* are internally developed through a process of staff collaboration. This also requires training for all school staff, but the staff development requirements are created more from the "bottom up" rather than imposed from outside. This both increases staff ownership of the program and coincides with the underlying nature of this model as a process of school reform.

- Finally, staff development for the *adjunct programs* is usually limited, and the training is typically confined to a small subset of the school staff. The required staff training for Reading Recovery, however, although also limited to a small number of staff, is significantly more rigorous requiring certified instructors who must commit to an initial 12-month training program.

The importance of staff development

As noted above, innovations that require staff to perform in ways that differ from their current practice or in ways for which they have not been trained require supportive instruction and opportunities for collaboration. Staff development can also be the strongest mechanism for altering existing school culture, especially teacher attitudes and beliefs (Fullan, 1990b). Furthermore, opportunities for collaboration and techniques such as peer coaching can reduce fragmentation and foster better integration of innovative programs into the broader schoolwide instructional program (Wilson & Corcoran, 1988; David, 1989; Little, 1989; Fullan, 1990b; Smith & O'Day, 1990).

Districts can facilitate this process by providing training specialists or "master teachers," supporting teacher and administrator networks, providing incentives and resources to attend professional conferences, encouraging practices that support collaboration, and providing resources for training sessions (David et al., 1989; Wilson & Wright, 1990). Districts can also support staff development by providing the time needed for staff to engage in these activities (Fullan, 1990b), and providing the leadership necessary to convey support for the importance of ongoing learning by staff (Schlechty, 1990).

Griffin (1983) suggests that staff development can be used to bring about five different types of school changes:

1. *Role Specific* changes that alter the relationships between administrative and instructional staff.
2. *Organizational* changes such as the introduction of team teaching.
3. *Curricular* changes that include, for example, the introduction of a new reading/language arts program.
4. *Personal* changes such as increasing the cultural awareness of the staff.
5. *Multi-focused* changes that seek to increase the collegiality of the staff and improve the school's climate for staff and students.

Griffin (1983) goes further to describe features of an "ideal" staff development program. He breaks these indicators down into three broad categories:

- Assessment—staff development should be designed as a consequence of "systematic problem identification by those most directly related to the problem."
- Context—staff development should be "formulated and monitored largely according to perceptions of the participants" after a "careful analysis of the organization and the people for whom it is intended" and it must be "flexible and responsive to the changes in participants and the changes in the setting."
- Content/Process—training should be "interactive," "situation specific," intended to "mitigate to some degree status differences between teachers and administrators" and, most

importantly, staff development should "depend less on consultants and more on teachers and administrators for substance and procedural guidance."

The remainder of this chapter describes training in terms of these dimensions. The preliminary information obtained during the initial site visits is summarized in Figure 7.1 on pages 7-4 and 7-5. An attempt has also been made to tabulate information collected on staff development activities both related to the implementation of the special strategy as well as general efforts to increase staff skills and opportunities for collaboration.

The following discussion examines issues related to staff development and is organized according to the type of model being implemented—philosophical approaches, schoolwide projects, and adjunct programs.

Philosophical approaches

This first category includes the Paideia, Comer, and Sizer models. Here the problem from a staff development perspective is creating a collaborative mechanism to translate the key principles into instructional practice. Because these programs are intended to be flexible, the success or failure of their implementation appears to be dependent on the ability of the staff:

- to gain a clear, coherent and consistent understanding of the model's "vision" of an effective school; and
- to translate this vision into specific instructional practice.

Because the philosophical approaches come from outside the school, and are broad-based school reforms, it is important that all staff including the principal be trained for successful implementation. Moreover, it appears that implementation of the philosophical approaches requires one or more "true believers" who serve as catalysts and help guide the adaptations of the general guidelines into day-to-day practice. Consequently, the challenge is not merely deciding what training should consist of, but also how it should be done to engender the level of commitment and collaboration needed to create a *process* of empowerment and change. Schools that can do this well appear to be those that are effectively implementing the intended restructuring initiative.

With regard to the specific models, various approaches and supporting mechanisms were used by the different study schools. For example, all five Sizer schools availed themselves of the opportunity to participate in training workshops at Brown University, the program's developer. However, only one site sent all of its staff to be trained—another sent most of its staff, another sent less than half the staff,

Figure 7.1

Staff Development Activities by Type of Program

Type of Program	Assessment of Need and Consideration of Local Context	Provider/Process	Scope
Philosophical Programs			
PAIDEIA	Staff development is critical for Paideia. Special strategy training developed externally and not tied to local needs. Other staff training—unknown.	Site A: Special strategy training through Paideia institute and at faculty retreats at start and end of the year. Also monthly after school seminars. Summer training for eight teachers at St. John's College, N.M. New teachers assigned a mentor.	All staff
		Other training—unknown.	
		Site B: Special strategy training from principal of another Paideia School. Also, external consultant provided 12-hour workshop for all staff in Paideia and 12 hours on Jr. great books. Several teachers visited other schools and attended annual conference in Chicago. New staff trained by coordinator. Staff hold weekly planning/coordination meetings.	All staff for most activities.
		Other training—modelling and peer observation and weekly grade-level planning meetings.	
COMER	*	*	*
SIZER	Staff development and collaboration is critical for Sizer. Special strategy training developed internally and not tied to local needs. Other staff training—unknown.	Site A: Special strategy training at Brown University plus staff development retreats.	All Staff
		Other training—unknown	
		Site B: Attend workshops at Brown University.	Not All Staff
		Other training—district sponsored workshops on team building. Also daily planning meetings	All Staff
		Site C: Attend workshops at Brown University.	
		Other training—unknown	*
		Site D: Attend workshops at Brown University. Visits to other Sizer schools.	
		Other training—weekly team meetings.	Principal and coordinator
		Site E: Attend workshops at Brown University and visit other Sizer schools.	Some staff All staff
		Other training—unknown	Half of staff

* Data currently unavailable and will be collected during future site visits.

Figure 7.1 (continued)

Schoolwide Programs			
SCHOOLWIDE/ EXTENDED YEAR	Staff development is critically important. Need assessment and context unknown for all sites.	District commitment to schoolwide program has included: 14 days of structured training for all teachers including one-week summer program; weekly staff meetings; visits to other program schools; "mentor teachers" who share their expertise and teaching techniques with other staff; and a special MA degree program in Education Administration sponsored in conjunction with the local state university (program limited to 30 teachers). Additional funding for staff development provided by a private foundation that made a ten-year commitment to this program.	All teachers, with individual teachers visiting other schools. Three teachers in each school in master's program.
SCHOOLWIDE	Site C: Needs assessment conducted as part of schoolwide application. Site D: Needs assessment conducted as part of schoolwide application.	Site A: Internally developed training Site B: • Site C: Local training on schoolwide projects, learning styles, instructional techniques, and classroom management via workshops and modelling. Site D: Local training both at school and district level.	Site A: • Site B: • Site C: • Site D: Extensive training of all staff prior to start of school.
Adjunct Programs			
SUCCESS FOR ALL	Defined by developer of special strategy—not tailored to local context. Other staff training—•.	Special strategy—Ongoing training provided by developer. Other: At SFA-A, three hours/month for grade-level planning and staff development plus two hours/month of unknown training. At SFA-B, two grade level staff meetings per mo.	All Staff. At SFA-A, high staff turnover affected training.
READING RECOVERY	Defined by developer of special strategy—not tailored to local context. Other staff training—•.	Special Strategy—One year of training at Ohio State University including clinical and peer critique. Reading Recovery-A site has access to other staff; Reading Recovery-B staff had to spend one year away from home and lack in-state resources. Other training—unknown.	Special teachers only. For other training, unknown.
TUTORING	Site A: Special strategy training defined by program developer—not tailored to local content. Other staff training—•. Site B: Training provided by LEA.	Sites A and B: Initial two-day workshop provided by program developer. Training for new staff provided by local coordinator. Other training—•. •	Special strategy, tutors only. Other training, unknown. •
CCC	Both sites: CCC training developed by program creator. Not tailored to local context. Other staff training—unknown.	Both sites: Training provided by CCC. Other training—unknown.	Computer lab staff for CCC. Other training—unknown.
EXTENDED TIME	No staff training for special strategy. Other staff training tied to curriculum changes.	Training typically provided by textbook agents, through seminars and workshops.	Grade-level staff.

and another sent only the principal and the program coordinator. Two of the sites used visits to other Sizer schools as a means of staff development, but in both cases these were limited to a portion of the total staff.

Staff at two of the sites expressed concerns that the training they received at Brown, while very "energizing," provided them little concrete guidance as to how to implement the Sizer principles. Although the intent of the Sizer model is to provide staff with the ability to create their own program, this message seems to have either been lost, or the lack of structure may have left at least some individuals confused and unsure of their next steps. To help alleviate such concerns, the availability of district-level support and resources for in-service teacher training as well as for ongoing weekly planning meetings appear to be key ingredients for success in the Sizer schools. Sizer-A in particular has made significant use of such mechanisms.

The Paideia model, on the other hand, is concerned both with the methods of instruction—didactic instruction, coaching and Socratic seminars—and the content of instruction, based on the traditional notion of liberal education. Therefore, staff development is needed for both instructional methods *and* content.

Prior to initial implementation, key school staff in Paideia-B spent time visiting other Paideia schools to gain a general understanding of the methodological approach and to determine how best to integrate it into their existing instructional program. This site also used a principal from another Paideia school to provide staff training. In Paideia-A, Paideia summer training workshops were used for this purpose, as well as to create a cadre of "master teachers" for the school.

Next, all of the instructional staff in both sites were trained in the use of the specific instructional strategies. Because this model requires a fresh approach to teaching, the training was intensive, requiring the assistance of experienced trainers—either external consultants or senior staff from other schools employing the Paideia model. Ongoing training and planning sessions are also typically used to discuss implementation, exchange ideas, maintain motivation, and hone skills. In Paideia-B, this process of collaboration among staff has led to some structural improvements (e.g., classroom organization) and, more importantly, the active involvement of teachers in the selection of student seminar topics.

Finally, in Paideia-A, eight teachers went to St. John's College in Santa Fe, New Mexico, to gain exposure to the "Junior Great Books" as a way to expand staff experience in the area of instructional content.

Schoolwide programs

Unlike the philosophical approaches that are externally defined, the schoolwide projects typically depend upon the principal to determine what the school should be doing and to communicate this vision to the teachers. In this case, the principal is the "true believer" who must define both the nature of the changes to be made and, in collaboration with the staff, determine the types of staff development needed and how to obtain the necessary resources. The extended year schoolwide projects also have structured training coordinated by the district's coordinator of the projects.

Consequently, successful implementation of a schoolwide program appears to be linked to the provision of significant resources for staff training; schools with little if any funding for this purpose seem to be less able to implement the intended broad-based restructuring. Schoolwide projects, representing an attempt to implement a *process* of change, also require ongoing efforts to provide both in-service training in specific instructional techniques (e.g., language arts, higher order thinking skills, assertive discipline) and continuing opportunities for staff interaction. For example, the extended-year schoolwide projects include an extensive effort to upgrade staff skills:

- 14 days of structured training for all teachers during the summer;
- weekly staff meetings;
- visits to other program schools;
- "mentor teachers" who share their expertise and teaching techniques with other staff; and
- a special MA degree program in Education Administration sponsored in conjunction with the local state university (this program is limited to 30 teachers across 10 schools).

Additional funding for staff development was provided by a private foundation that made a ten year commitment to this program.

Another type of schoolwide program, Success for All, involves, at least at the beginning, a close association with staff from The Johns Hopkins University who provide formal training in classroom instructional strategies and specific training for the new curriculum that is part of this program.

The first step in Success for All training is taken as the school and district administration decide whether they wish to adopt the program. Awareness materials and visits to existing schools provide information about the program, and enable the principals, teachers, and district to make a decision and to understand the commitment required for making the program a success. After becoming aware of the scope and components of the program, 80 percent of the teachers to be using the program must vote to adopt.

During the spring prior to the beginning of implementation, the facilitator and principal attend three days of meetings in Baltimore during which they receive training in the basic structural and curriculum components as well as in their role in supporting the program. They receive a detailed overview of the purpose and structure of tutoring, regrouping during reading, the family support team, attendance programs, the building advisory team, cooperative learning, faculty support mechanisms such as coaching and grade group meetings, as well as specific curriculum programs such as STaR, Beginning and Beyond the Basics. The role of the principal and facilitator in managing and supporting the program are explored in detail. Planning and scheduling issues for each school are discussed individually.

Specific curriculum training for teachers begins the spring prior to implementation as well. Two trainers spend two days at the site introducing the staff to the purpose and structure of the whole program, and then introducing the specific curriculum components they will be using with their materials. All manuals are provided to the teachers at this time. Specific curriculum training is completed during three days of training conducted by two trainers during the late summer prior to implementation. The focus during these three days is on the details of implementation of the curriculum.

Training does not stop at this point. The most important element of the role of the facilitator is that of ongoing trainer. The facilitator is to observe in each classroom frequently, and provide consultation, demonstrations, small group retraining and discussion and so on as needed throughout the year. Grade group meetings and opportunities for peer coaching also provide for continuing growth in the skill and confidence of the individual teacher in implementing the program. In addition, Hopkins-based personnel visit the school in the fall and winter to help the site-based staff to assess implementation and to provide any additional training needed at this time. For schools outside of Baltimore, two trainers spend two days at the site in October and January.

The year is brought to a close with a spring administrators' meeting in Baltimore. An assessment of the year is conducted, and plans for training for the coming year are made. This training may involve the addition of components to the program or a renewal of training for components already begun.

Adjunct programs

Most adjunct programs require little or only moderate amounts of staff training to be implemented. This is primarily because they depend on the involvement of a few staff members and the new skills required for implementation are generally modest. Those programs include the extended time Chapter 1 Club, CCC and the different tutoring models.

The Chapter 1 Club, an extended-day enrichment program, required training to start the program, nor was any needed on an ongoing basis. Staff collaboration is important, however, to plan new activities and integrate the program into the regular instructional program. Limited attention to these aspects in the program's second year seems to have caused some unfortunate implementation difficulties including a loss of an instructional focus.

Computer-assisted instruction requires a trained and experienced person to set up and run the computer lab(s). In general, schools hire someone with the requisite skills (or move an existing staff member into this position) rather than try to develop the needed qualifications through in-service training. Continuing staff development is sometimes, however, necessary to ensure that the lab director stays abreast of new developments in the field given the current dynamic nature of microcomputer technology and educational software. Beyond the computer lab director, an important factor for successful implementation is the training provided to the para-professionals who usually play a key role in the day-to-day operations of the instructional program.

This is particularly important in the case of systems such as Writing to Read that are managerially complex. Students move among four work stations in the computer lab (including an audio-station for vowel sounds and blends, a manipulatives section, a listening to stories section, and computer terminals for writing stories). In the extended-year schoolwide projects, the programs are reasonably well-managed, with the teacher and aide(s) moving students from one station to another quite effectively. In one Success for All school (SFA-B), on the other hand, staff appeared poorly trained in the use of the laboratory.

It also appears that a danger with the computer-assisted instruction programs is the tendency to pay little attention to the need to involve the regular instructional staff in the program. In CCC-B, while such coordination is verbally valued by the administration, there is no joint planning or discussion time for teachers and CCC staff. Consequently, the computer instruction may be totally divorced from the regular classroom curriculum and not have the support of the teachers. The latter problem can translate into students receiving negative messages about the pullout program. Enhanced collaboration among the staff would, therefore, be a way to significantly strengthen the program.

The schools involved in this study which are implementing the METRA peer tutoring program require initial training by Educational Planning and Evaluation Services Inc., the developer of the program. Subsequent training of new staff, and any needed retraining, is handled by the Chapter 1 coordinator who services as a "master trainer" for the school. Again, little training of other school staff (beyond the teachers and the para-professionals) seems to have been done. Consequently, it appears that some limited in-service training may help to better integrate the program and foster a sense of collaboration and support for the program among the school staff.

Reading Recovery explicitly requires the most intensive training of any of those examined in this study. Because this program is so prescriptive, and it requires formal certification of the Reading Recovery teachers, a school implementing this model must invest a substantial amount of resources in staff development. If training centers are not available locally (generally the case), staff must be trained at Ohio State University or a similar facility for 12 months. The training is both extensive and rigorous, involving a great deal of clinical experience and peer critique. Self-diagnosis is an important part of the program. Ongoing training—involving weekly meetings, periodic evaluations by a master trainer, and summer workshops for the master trainer—is also necessary after the initial training is completed.

Expansion of the program, either within a single school or to multiple schools in a district, is highly constrained by the availability of trained tutors. The model also involves a heavy reliance on training sites, such as Ohio State University, both for initial training and ongoing staff development.

Future questions

Future site visits will focus on the indicators suggested by Griffin (1983) for both the special training received by school staff as well as for regular ongoing efforts to improve staff skills and provide increased opportunities for collaboration. In particular, the following questions have been suggested for inclusion in future site visits:

- What is the level of staff ownership of the staff development program? Is it viewed as "theirs" or is it imposed from the outside?
- Are faculty meetings used for staff development? How is this done?
- What is the cost of staff development? How is staff time allocated or re-allocated? Are principals going into classrooms to free teachers for staff development activities? What are the internal school resources used for staff development? What is the role of external resources?
- What is the context for staff development activities, especially the background and skills of existing staff?

Chapter Eight

External Factors for Implementation

By

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One of the lessons that has come out of the implementation literature is the acknowledged importance of the relationship between an organization and its external environment (Berman, 1978; Fullan, 1991). Any organization, including a school, does not operate in a vacuum. The contextual setting within which it is situated and its linkages to a variety of external entities can, to a great extent, determine its eventual success or failure.

The effective implementation of the special strategies is dependent on such external factors. On the one hand, these supports include obvious tangible resources such as additional funding, provision of staff training, new instructional materials and equipment, and, in some cases, modifications to the physical space (e.g., building a new or expanded computer lab). Often, however, intangible forms of support can be equally important to the program's success. These include such things as a regulatory environment that facilitates innovation, the encouragement and moral support of both superiors and peers, parental backing for the particular innovation as well as, in some cases, their direct involvement in the instructional process, and, in some situations, the involvement of community agencies in the program's implementation.

The extent to which any of these factors is important for successful implementation, however, varies across the different special strategies that are the subject of this study. For example, some programs—particularly the schoolwide projects and Comer schools—have explicit requirements for increased parental and community involvement. Consequently, the success of these programs is closely tied to the ability of school staff to affect these changes and can, in turn, be helped (or hindered) by the local context in which the school operates (e.g., it is more difficult to provide social services to students and families in communities where a dearth of public and private support programs exist). For other programs, the importance of community services and parental involvement are far less critical.

Further, the source of these different types of external supports can also vary from program to program. In some cases, the special strategies are highly dependent on external consultants for instructional materials and staff training and guidance during implementation. In other cases, districts and schools are solely responsible for the development and implementation of a special strategy. Funding can also be provided by private organizations to support program implementation. This can be an important addition to traditional public funding of education, but may leave the school in a difficult position if such funding sources disappear in the future.

This chapter presents a preliminary look at the importance of external factors for successful implementation. The chapter is organized around the three mechanisms for providing support to the special strategy schools—from state and district education agencies, from parents and community agencies, and from external consultants and other private agencies. Figure 8.1 on page 8-3 summarizes the currently available information related to the importance of external implementation factors; Figure 8.2 on page 8-4 summarizes information related to external constraints on program implementation. The following discussion examines some of the major themes that emerge from these very preliminary data.

District and state context

Schools cannot be viewed as single independent entities—schools function within districts that in turn function within a structure of state administrative controls. Moreover, changing schools cannot occur without the support of district and state administrative organizations (Cohen, 1988; Bossert et al., 1982). The extant literature suggests the following components may be important for effective education:

- Leadership support for school-level changes particularly the time and resources needed for planning and staff development (Purkey & Smith, 1983; Cohen, 1988b).
- Hiring, assigning and evaluating school administrators, teachers and support staff (Purkey & Smith, 1983; Cohen, 1988; Wimpelberg, 1987).
- Curriculum support including setting goals and objectives and providing appropriate textbooks, supplies, and instructional materials (Corcoran, 1988).
- Providing resources needed to support the innovation including funds, materials and facilities, and financial incentives to attract and retain qualified staff (Berman & Pauly, 1975).
- Authority and flexibility to allow schools to make changes (i.e., devolution of control) including necessary freedom from regulatory constraints (David, 1989; Cohen, 1988b).
- Professional support including specialized expertise necessary to ensure successful achievement of local objectives.
- Opportunities for ongoing staff development.

Although the case studies do not systematically address these topics, preliminary evidence from the initial site visits seem to indicate some of these same factors are also important for implementing the special strategies. These are examined below.

Figure 8.1

External Factors Supporting Implementation by Type of Program

Type of Program	External Resources
Philosophical	
PAIDEIA	Program developed externally. Training provided by Paideia Institute, and St. John's College, N.M. Paideia-A has strong district support for program; support in Paideia-B is weak. Paideia-A received large grant from a private company.
COMER	Program developed externally at Yale University. Comer-A: Strong district support for program. Community support at all levels is critical for success and is strong at this site. Have established strong social service agency linkages. Comer-B: Lack of district and community support. No money for staff development.
SIZER	Sizer—All sites received program design and staff training from program developers at Brown University. Re:Learning supported program implementation. Sizer-A: Collaboration with private company and Soc. Sec. Admin., but tie in with program is unclear. Received private donations from local businesses and nonprofit groups. Sizer-B: Strong district support, especially for staff training.
Schoolwide	
SCHOOLWIDE/ EXTENDED YEAR	Federal policy allows schoolwide Chapter 1 programs. Both sites part of special district program. Strong community support. Site B has somewhat greater resources available.
SCHOOLWIDE	Federal policy allows schoolwide Chapter 1 programs. In urban sites, the presence of a program support teacher was deemed critical. Schoolwide-C: Received grant from private company to train one teacher.
Adjunct	
SUCCESS FOR ALL	Johns Hopkins provides program design and materials, supports, implementation, and trains staff. SFA-A is better supported including a $250,000 foundation grant for initial implementation.
READING RECOVERY	A few universities provide program design and materials, and trains and certifies staff. RR-A: State mandated program throughout state; proximity to a training site helped implementation as did access to other sites. RR-B: Staff had to spend one year in Ohio for training—no nearby sites for support.
TUTORING	Tutoring-A: External consultant provided program design and materials. Tutoring-B: Faculty at state university assisted with program design.
CCC	CCC-A: Large-scale investment in computer hardware (48 terminals) and software. CCC provides software system and training of computer lab staff. CCC adopted district wide—staff rely heavily on district and CCC representatives. CCC-B: Large investment in computer hardware and software. Initial district-level dependence on CCC, now somewhat more reliance on in-house staff to increase "ownership." State and district are supportive of program.
EXTENDED TIME	None.

Figure 8.2

External Constraints to Implementation by Type of Program

Type of Program	External Constraints
Philosophical	
Paideia	Paideia–A: City is in the midst of major school restructuring shifting to local control. Effect is unclear.
Comer	*
Sizer	Sizer–D: Continued funding is an issue. Sizer–E: Severe financial constraints—staff being laid off.
Schoolwide	
Schoolwide/ Extended Year	District policy changes (such as shift to year round schools and reassignment of personnel) and funding shortfalls have endangered five-year commitment.
Schoolwide	Schoolwide–B: Severe lack of community resources. Schoolwide–C: Severe lack of community resources.
Adjunct	
Success for All	SFA–A: Large Asian LEP population affects student learning and parent involvement. SFA–B: Need to find new funding source to replace initial implementation grant.
Reading Recovery	RR–A: School is very overcrowded RR–B: *
Tutoring	Tutoring–A: Program was adopted to save money by sifting to paraprofessionals. Cannot use full METRA program because textbooks are not state approved. Tutoring–B: Some teacher resistance to cross-age tutoring.
CCC	CCC–A: High level of Spanish LEP students and migrant population (35%) require additional resources. CCC–B: *
Extended Time	High level of Spanish LEP students requires additional resources. Lack of school/community resources—impoverished community.

* Data currently unavailable and will be collected during future site visits.

Leadership support for school-level changes

At the highest level, federal Chapter 1 policy fostered the development of the schoolwide programs. In particular, most of the schoolwide project schools in this study could not have implemented this model until the matching requirement was removed with the Hawkins-Stafford Amendments of 1988. State and district support also played a role in start-up of the Chapter 1 schoolwide projects, particularly in the case of the extended-year sites where the district has created a special program involving ten schools. State level involvement in Re:Learning has also fostered the spread of the Sizer model.

A number of sites exhibit important differences in the extent of the support they receive from their respective districts. The two Comer schools, for example, receive very different levels of encouragement from their districts as well as significantly different levels of financial assistance. The less well supported school, as a consequence, has little if any funds available for staff development. The two Paideia schools have also received different levels of support from their districts which may be related to an observed difference in the extent of staff development available for the instructional staff in the two schools.

The two CCC schools were also viewed as different in terms of the extent of the support they received from their respective school districts. The more successfully implemented program (CCC-A) has been given a great deal of ongoing encouragement from district staff as well as needed financial support and technical expertise. While the CCC-B district is also responsible for introducing CCC, the ongoing decisions about CCC use are made by the schools with no external network of support.

Finally, the district of one of the two Paideia sites (Paideia-A) is currently in the midst of a major school restructuring program that greatly increased local control over school management. The effect of this change on program implementation is unclear at this time.

Authority to make changes

Broad-based changes such as the various philosophical programs and the schoolwide projects also appear to require substantial commitment from district- and state-level administrators to provide the flexibility and authority needed to make the types of wholesale modifications demanded by these models.

For example, in districts supportive of site-based management, special strategies requiring such administrative changes may be easily implemented. On the other hand, districts requiring such administrative changes in which schools have little autonomy from the central office may impose change on an unwilling school. In Comer-B, for example, the principal had no say about whether the Comer project would be implemented in his school. The principal also had no voice in what grades were to be served by the Chapter 1 program, or what Chapter 1 program designs were to be used. To date, the Comer model's shared decision-making has not been implemented, in part because the principal will not relinquish his traditional management role.

The schoolwide extended-year projects seem to have both benefited and suffered as a result of district-level actions. On the positive side, allowing schools to adapt a general model to best suit their individual needs and constraints appears to have supported successful implementation. For example, the principal of urban extended year schoolwide project found a special Saturday clinic (one component of the strategy) to be ineffective and has decided to shift funds used for this purpose to increase the current after school tutoring program. On the other hand, a lack of central coordination has on occasion affected implementation as general district-wide policies have sometimes run counter to the needs of the schoolwide program. For example, the district sponsoring the extended-year schoolwide projects was to start a year-round calendar in all its elementary schools, which would have interfered with the extended-year schools. After lengthy negotiations, the extended-year programs were allowed to continue as originally planned.

One of the two tutoring sites (Tutoring-A) has also been affected by state policy limiting their ability to make the changes envisioned by their adopted strategy. Because the special textbooks are not currently on the state's list of approved school textbooks, the school is unable to implement the full METRA program.

Provision of resources

Computer assisted instruction, for example, is particularly resource intensive requiring investment in computers, software and technical staff to implement and maintain a complex computer lab. The district's ability and willingness to meet these specialized needs appears to also have distinguished the more successfully implemented program. Similarly, in the extended-year schoolwide programs, greater resources in CCC-B allowed the development of separate computer labs for English- and Spanish-speaking students permitting the delivery of better services to the Latino students. CCC-A lacked these resources and, as a consequence, is less able to meet the needs of all of its students as originally envisioned in the concept of a schoolwide project.

Although considerable support is provided by the strategy's developer, Success for All also seems to require a significant investment on the part of the district. In SFA-A, for example, the level of resources is less than adequate to meet the program's needs, and implementation appears to have suffered as a consequence. Similarly, the two extended-year schools differed in the availability of air conditioning which was an important factor for both teachers and students during the oppressive heat of the summer months.

In Sizer-D school, the superintendent was planning to reduce athletics in the middle schools to support, among other things, the added expense of the Sizer program. The Sizer program and the continuation of sports became a campaign issue during the school board elections, and are now being addressed by the elected board. The availability of resources can also be critical for the initial decision to initiate an innovative program. For example, the small rural Sizer school (Sizer-E) would probably not have started without the participation of the states in the Re:Learning project sponsored by the state department of education and the Education Commission of the States.

Staff hiring and assignment

In computer-assisted instruction, for example, the hiring of a qualified individual to operate the school-based lab seems to be critical to the program's success. Without this key individual, such programs would be difficult to implement. Similarly, the hiring of the Program Support Teacher in the urban schoolwide projects appears to be a significant factor for successful implementation.

The fiscal health of the state and school district can also affect staff hiring and, in turn, the implementation of the special strategy. For example, in the most extreme case of Sizer-E, one third of the teaching staff received "pink slips" informing them that they might not be rehired in the fall. All professional support staff also received "pink slips" in the two schoolwide extended-year projects. Their functions in the schools were to be maintained, but they were to be replaced with personnel with more tenure in the school district.

Staff development

The possible importance of state administration is best seen in the comparison of the two Reading Recovery schools. On the one hand, RR-A is located in a state that has made a commitment to implement the program statewide. As a consequence, there is a high level of district and state support for the program and greatly increased opportunities for collegial interaction among staff in different schools. More importantly, Reading Recovery requires extensive staff training and the burden of this requirement was shifted to the state which assumed primary responsibility for the required staff development. The comparison school (RR-B) is an isolated implementation of Reading Recovery involving a significant investment of state and district resources for training including sending one staff person to Ohio State University (the program's first U.S. training site) for a full year of training.

Community/parental support

Support from parents and other community organizations (churches, social groups) is also valuable to help improve the education of disadvantaged children (Comer, 1988; Committee on Policy for Racial Justice, 1989; Epstein, 1989). Furthermore, bringing parents and the community into the educational process may help provide a bridge between staff and the cultural milieu of the students they serve (Shields, 1990). This topic, more fully examined in Chapters Eight and Nine, is included here for completeness.

In the current context, it is important to separate two aspects of parental and community support: programmatic features of the special strategies that are intended to increase such involvement; and parental and community support as facilitating factors for effective implementation of these educational innovations. Examples of the former are the inclusion of parents in site-based management teams in the schoolwide and extended-year schoolwide projects, school-based parent outreach and training components in the Success for All model, and, of course, Comer's extensive effort to open schools to parental and community-based involvement and control. The extent to which school staff are able to gain significant involvement appears to be an important factor related to effective implementation of these models. For the most part, success in this area is related to the same factors discussed to this point—the leadership and management ability of senior school staff, the skill of the staff, and the degree of support provided by the school district. Other factors that can impede implementation include the nature of the community being served (i.e., severe poverty can lead to parental isolation, depression, and an inability to take charge of their own lives), language or other cultural barriers, and a lack of community-based institutions and social services.

Other strategies—primarily the adjunct programs—typically do not have an explicit requirement to increase parental or community involvement but their implementation seems to be facilitated by such support. Moreover, active and involved parents are almost universally seen as a positive contribution to the general school performance as well as to the implementation of any educational innovation. Schools considered to be successfully implementing a particular model were generally also those able to engender a pervasive sense of parent-school collaboration. Change and innovation, therefore, appear to require the trust of parents to even get started; i.e., schools that have not been able to create such trust may find it difficult to make wholesale changes in their instructional program. Obviously, the level of support needed will vary according to the magnitude of the changes being made, but this does not negate its underlying importance.

External consultants

In almost every case, the special strategies under study represent attempts to implement programs developed outside the school; a notable exception is the extended-day "Chapter 1 Club" which was the creation of an energetic school principal. Without the particular developers, each of these strategies could not be implemented. However, the role of the original developers in ongoing program implementation, and a school's dependence on them, varies quite extensively. For the most part, this level of dependence is closely related to the constraints imposed by the particular model on the fidelity of its implementation—the more circumscribed the model, the greater the dependence on the developer.

At one extreme is Reading Recovery, which requires substantial training for staff to become certified tutors. Unless approved training sites have been established in nearby locations (i.e., certified tutors in other schools) schools wishing to implement this model must be able to send staff to Ohio State University (or another site) for up to a year of training. Because the developer demands strict adherence to the fidelity of the instructional model, divergence from the prescribed procedures can lead to decertification of the school's program.

Somewhat less restrictive, Success for All also requires intensive support from its developer for successful implementation. This consists of staff training, the provision of all instructional materials, and at least during the early stages of implementation close collaboration with developer staff who monitor the process and can take corrective action when needed. Limited involvement seems to be an important factor in the weak implementation in SFA-B.

Finally, in the loosely structured philosophical approaches, training focuses on understanding the philosophy of the program and team building, but not on concrete curriculum materials. This flexibility is one of the purported strengths of these models. In addition, the closer the ties to the developer, the more likely the philosophy is well understood. Proximity to the developer may also be important. The two Paideia programs are located close to universities with specialists in Mortimer Adler's approach. The more well-implemented Sizer schools have close ties (if not proximity) to Brown University.

Future questions

As discussed at the start of this chapter, information on external resources needed to support the implementation of the special strategies was not systematically collected across the 24 case studies. Therefore, future site visits will focus more carefully on these concerns. In particular, for each site the following questions need to be asked:

- What is the role of federal, state and district policies in the implementation of the program? What resources were provided to support implementation?

- What is the role of parents and community institutions in the program's implementation? How important are these factors for successful implementation?

- How dependent are the schools on external consultants? How successful were these collaborations? What factors led to greater or lesser success? How does the use of external parties affect the degree of program ownership among school staff?

- What external factors constrain the implementation of the special strategies? How does this vary by program and by the school's context (e.g., urban vs. rural, student characteristics)?

Early indications are that external factors play an important role in the implementation of the special strategies. Future site visits will have to explore this area in more depth to increase our understanding of what makes for successful implementation of these programs and, more importantly, the likelihood of replicating these models in other schools.

Chapter Nine

Parent Involvement

by
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Overview

Parent involvement in their children's education is increasingly viewed as important for children's success in school, especially in the early years. Recognizing the value of sound home-school relationships, educators have begun to provide more opportunities for parents to become involved. One major indication of this trend is that the Hawkins-Stafford Amendments of 1988 mandated increased attention to parent involvement in Chapter 1 schools. Yet attention to parent involvement is not limited to Chapter 1 schools and students; recent research suggests that meaningful parent involvement is increasingly perceived as key to any child's successful schooling (Delgado-Gaitan, 1991; Epstein, 1987, 1988). In this chapter we explore the range of parent involvement activities in special strategy schools, and assess factors associated with effective parent involvement.

The sites selected for this study were chosen because they represent examples of special efforts to work with children, and not because they have or lack parent involvement. As a result, the schools vary widely in their parent involvement endeavors. Further, what we know at present is based primarily upon parent involvement vis-a-vis the special strategy, and much less upon schools' efforts to involve parents outside the strategy. Strategies that are adjuncts to regular instruction, for example, are not designed to focus on parents' roles in the same way(s) as do projects that focus specifically on ways to improve parent involvement (among other objectives). Further, elementary schools are historically more likely than high schools to invite parents into classrooms, to have periodically scheduled parent-teacher conferences, and to communicate regularly with parents. The elementary schools represented in this study are also more likely than high schools to provide more parent involvement activities, although some of the high schools in our study work more with parents than do traditional high schools.

Earlier in this report, we discussed how different sources and external levels of support contribute to a given strategy's effectiveness (see Chapter Eight). Parent involvement can indicate the level of support within a community for a particular strategy. How parent involvement is defined and operationalized, and whether it does serve as such an indicator, varies widely in this group of schools. In some schools, especially those with schoolwide projects, parents are perceived as valuable contributors to the successful implementation of the various components of the schoolwide project. Parents' participation in school committees, as volunteers in the schools, and as visible links to the community represent some of the ways schoolwide project sites utilize parent involvement. None of the schools in our sample require parents to be involved in the school in order for the particular strategy to work, although a number of schools either welcome or solicit parental involvement. Among the types of parent involvement in these special strategy schools are the following:

- Informing individual parents about the content and goals of their child's progress;
- Sponsoring parent workshops or special events for parents;
- Supporting a parent-school liaison who serves as a bridge between families and schools; and
- Inviting parents to participate in aspects of the program's daily operation.

Specific aspects of parent involvement in the special strategy schools will be addressed in the body of this chapter:

- Parent involvement as an objective of the special strategy;
- Activities undertaken to involve parents;
- Parents' perceptions of their participation; and
- Factors that influence parent involvement activities.

Each of these topics is discussed below for the entire sample of schools and, where appropriate, for specific subsets of schools. The chapter concludes with a brief discussion of questions to be asked on future site visits.

Preliminary findings from the first year of site visits suggest that effective parent involvement programs share a number of features:

- Program design that explicitly includes parent involvement;
- School leadership that establishes the relevance and value of parent involvement;
- Seminars or presentations for parents that appropriately reflect parents' culture, language, and concerns about their children;
- School support through commitment of staff, supplies, time, or other resources for parent involvement; and
- School climate that is welcoming and respectful toward parents.

The features of effective parent involvement programs within this sample are strikingly similar to those found in other settings. In fact, one researcher has developed a typology of parent involvement programs that characterizes them according to the locus and nature of responsibility accorded parents and schools alike (Epstein, 1988). As we continue to collect information on the parent involvement programs at the schools in this study, we will explore whether extant typologies accurately characterize this set of programs. How many of the special strategies do in fact address parent involvement? Ought they?

Parent involvement as an objective

Parent involvement is perceived as an explicit objective in 16 of the 25 schools' strategies. Figure 9.1 illustrates whether parent involvement is an objective either of the strategy or the school and summarizes the extent of parent involvement opportunities. Schoolwide projects are more likely than other special strategies to characterize parent involvement as one of several key objectives. Further, schools that identify parent participation as important are more likely to provide a wide range of opportunities for parents to become involved. In fact, 10 of the 15 schools where parent involvement opportunities are multidimensional are Chapter 1 elementary schoolwide project sites.

All eight schools where parent involvement is not perceived as an explicit objective of the strategy are elementary schools, and seven are rural or suburban sites. The strategy at these seven rural/suburban elementary schools is either an add-on to the school's regular instructional program or a schoolwide project that has suffered from implementation problems. The remaining site is an urban school that has adopted the Paideia philosophical approach. Schools whose special strategies are *not* schoolwide projects are much less likely to characterize parent involvement as an explicit goal.

Activities undertaken to involve parents

Where parent involvement is an objective, schools typically use a variety of approaches to involve parents. The techniques employed range from scheduling meetings at times convenient for parents to attend, to inviting parents to serve on school or district committees, to offering workshops for parents, and providing parents with a resource room for use while on campus. Some schools formally designate a staff member to serve as the liaison between families and the school. Others do so in less formal ways as well, as at one urban schoolwide project school, for example, where the crossing guard functions as an informal link between the community and the school.

Outreach to parents

The outreach to parents often begins before or at the start of the school year, when schools hold orientation meetings for all Chapter 1 parents. The impetus for reaching out to parents comes from teachers, administrators, other concerned school staff, and sometimes local community members—

Figure 9.1

Parent Involvement in Special Strategy Schools

An Objective of the Strategy, School, and Range of Opportunities

Program/Site	Objective of Strategy	Objective of School	Range of Opportunities Narrowly Defined	Range of Opportunities Multi-dimensional
Elementary Schools				
Philosophical Approaches				
Comer–A, –B	Yes	Yes		Yes
Paideia–A	No	Yes		Yes
Paideia–B	No	No	Yes	
Schoolwide Projects				
Schoolwide–A, –B, –C, –D	Yes	Yes		Yes
Extended Year Schoolwide–A, –B	Yes	Yes		Yes
Success for All–A, –B	Yes	Yes		Yes
Adjunct Programs				
Extended Time–A, –B	No	*	*	*
Computer Curriculum Corp–A	No	Yes		Yes
Computer Curriculum Corp–B	No	*	*	*
Tutoring–A	No	Yes	Yes	
Tutoring–B	No	No	*	*
Reading Recovery–A, –B	Yes	*	Yes	
High Schools				
Philosophical Approaches				
Sizer–A, –B, –C, –D, –E	Yes	*		Yes

Figure reads: At Schoolwide Project Sites A, B, C and D parent involvement is an objective of the special strategy and the school, and the opportunities for parent involvement are multidimensional.

* Denotes not known at present

including parents. Outreach efforts are characterized by school staff as contacting parents about becoming involved in the school both pro-actively (that is, out of interest in the welfare of the school or an individual child) and reactively (that is, in response to a child's behavior or performance). At one school whose special strategy is a summer migrant program (Extended Time–B), two outreach coordinators contact parents at the beginning of the summer about having their children participate in the program.

The Comer model puts particular emphasis on parents, including equal partnership in school decision making. The Comer schools in our study, both of which are elementary schools, integrate community and parent involvement into the life of the school, and outreach to parents is a strong suit. At the Sizer Coalition of Essential Schools (also referred to as CES sites), adherence to CES principles includes regular conversations between parents and teachers; one school (Sizer–C) uses a telephone tree to facilitate such conversations. Another site (Sizer–D) uses a team approach for both teachers and students; in this high school, teachers consult with their team colleagues about students' progress and make regular efforts to contact parents about their children's progress. Teams also hold monthly parent meetings attended by an average of 40 percent of the parents. This turnout is exceptionally high for a high school. One other high school (Sizer–B) also has extensive parent involvement. Other schools rely upon more traditional outreach strategies, such as written announcements (to school events or parent-only events) sent home to parents, or individual teachers' efforts to call parents.

Schools with more extensive outreach efforts are more likely to have a permanent staff person who serves as home-school (or community-school) liaison, and schoolwide project sites are much more likely to support such a position. Five of the six schoolwide project sites, for example, have liaisons, and the school that does not support a liaison is nevertheless concentrating its efforts on improving the home-school rapport.

Formal and informal parent involvement strategies

Parent involvement efforts occur through formal procedures as well as through informal means. At the two Comer schools, for example, parents are part of two school-based case-management teams. One team is called the School Planning and Management Team (SPMT) and the other is the Mental Health Team (MHT). The teams are comprised of parents, teachers, administrators, and other school staff such as guidance counselors or school psychologists. Both Extended Year Schoolwide Project sites have extensive opportunities for parents to participate in school-based activities, including majority membership on the site-based management team. At one of the Success For All sites (SFA–B), parents are welcome to stop by a child's classroom during the school day to talk with the teacher, and many parents do so; one unintended consequence of such informal involvement, however, is that occasionally so many parents do stop by that students' instructional time-on-task suffers as a result.

Only one of the 25 schools, the Comer-A site, involves parents in school decision making, including the hiring of teachers. This school's recognition of parents' involvement in decision making is unusual. Even those schools that do provide a variety of formal or informal involvement opportunities share a commitment to parents' involvement in the *operation* of the special strategy; what is less evident at present, across all schools, are efforts to involve parents in the *planning* of special strategies. The Comer-A school represents the only example of a site trying to change the fundamental nature of parent involvement. To a lesser degree, the two Extended Year Schoolwide Project schools, by virtue of parent representation on the school's management team, may also present more opportunities to parents to participate in the planning of the special strategy itself. What these few examples illustrate is that schools in which parents' involvement occurs only within a proscribed set of activities have yet to include parents in the more formal participation in planning and operating the special strategy.

Where parent involvement is explicitly described as a key objective, as is more likely at schoolwide project sites, formal involvement is also more likely. School staff make a point, at one rural schoolwide project elementary school (Schoolwide-C), to identify parents, along with every student, teacher, and staff member, as part of the program by designating the entire community as the school's constituency. Teachers at this school routinely conduct "Parent Days," during which parents and other family members are invited to attend school and participate in activities.

At schools that do have parent involvement activities, school/program staff inform parents about the special strategy and describe opportunities for parental involvement throughout the school year during beginning-of-year orientations. At minimum, parents are invited to volunteer as classroom or office aides, field trip aides, or in other capacities on the school campus. In schools with more active involvement, parents are asked to participate in workshops (with topics they sometimes choose), to assist with their children's learning—sometimes via contractual agreements with the teacher—at home, and to assist with their children's learning in school, by visiting or helping within the classroom.

The examples described above all represent schools where parent involvement is part of or an outgrowth of the special strategy. There are also several other schools that have quite extensive parent involvement, both formal and informal, but such involvement is not explicitly connected to the special strategy we are studying. One computer-assisted instruction site (CCC–A), for example, has monthly parent meetings, a parent advisory council at both the school and district levels, and parent workshops—none of which focuses on the special strategy. The school (Extended Time–B) that hosts the summer migrant program offers a wide variety of activities for parent involvement during the regular school year, including a counselor who can provide family therapy, parent seminars, and an observation week in the winter when parents are invited to come in, observe, and meet the teachers and aides. Because the parents

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typically work very long hours during the summer, parent involvement at that time is limited. Unfortunately, few of the "settled out" summer migrant students attend this school during the academic year.

Opportunities for parent-staff collaboration

Collaborative efforts between parents and their children's teachers or other school staff is the hallmark of Comer schools, where collaboration between school staff and parents is a deliberate element of school operations and philosophy. Parents are to participate as equal peers on Comer schools' School Planning and Management Teams (SPMT) as well as the Mental Health Teams (MHT) with school staff. The Coalition for Essential Schools (CES) or Sizer schools can provide parents and staff the chance to work together as collaborators, and at one urban school (Sizer–C), there are monthly progress reports via telephone calls from teachers to parents. At another Sizer (Sizer–D) school, parents of students who are not performing well academically are asked to sign a contract indicating that they will help with homework and attend to the student's progress. To date, only Sizer–D (one of five Sizer schools) has significant parent participation in the monthly team meetings; this involvement, however, is primarily reactive to the school's assessment of student progress, particularly when students are having trouble.

One of the rural schoolwide project sites (Schoolwide–C) has a somewhat different kind of school staff-parent collaboration. This school, which serves Native Americans, is located on a campus several miles away from the community in which the students live. While the school does provide a wide variety of parent involvement opportunities, one of the school's central goals is to preserve the students' cultural and tribal identity. The village leader said "All our children should first learn all there is to learn about our culture, and put that in their left pocket. Then they should learn from the white man's culture, and put that in their right pocket. With both of these, an Indian can survive and prosper." The school principal concurs, and believes that it is the school's responsibility to educate the children, foster their self-esteem, and help them integrate different aspects of their lives.

This school and community have struggled, collaboratively, to create a learning environment that honors the beliefs and practices of the community. The very fact that this is the only school with such explicitly articulated aims raises a question about the directionality of parent involvement: ought parent involvement be a means of providing greater opportunity to learn about and adopt school (mainstream) values? Or ought parent involvement be a means of preserving cultural and ethnic identity? Certainly "good" parent involvement could well be somewhere in the middle, but this singular example highlights an important issue.

Parents' perceptions of their participation

Information on parents' perceptions from school staff is helpful in learning about the schools' views of parents, and information about parents' perceptions from the parents themselves sometimes tells a different story. We have only collected limited data on parents' perceptions of the effectiveness of their participation; during our first year site visits, we were able to interview about half of the target children's parents or guardians. Many of the parents interviewed had definite opinions about the school and readily offered comments. In some schools, some parents interviewed knew about the special strategy. One parent knew, for example, about some new activities such as a computer class and a homework club at her daughter's schoolwide project site (Schoolwide–A), but did not know that the school was operating a schoolwide project. By contrast, another parent whose child participates in the Reading Recovery project was quite familiar with the project because she had been asked directly to work at home with her child on elements of reading (RR–A); the other parents at that school, however, did not know about the specific strategy. Overall, however, parents' comments reflected awareness of school-level rather than strategy-level programs.

There are two exceptions to this general pattern. One is Comer–A; parent involvement has apparently increased steadily over the five years that the Comer model has been in place, suggesting that parents perceive their participation as effective. Additionally, because parents have genuine input into decisions that affect the school through their participation on the School Planning and Management Team and Mental Health Team, it seems quite evident that parents have invested considerable effort (as have school staff) into the program. Another exception is the rural schoolwide project site (Schoolwide–C) serving Native Americans. When the school's current principal assumed her position, she did so at the behest of the local school board and community—which has strong Native American representation. The principal sought out, and continues to seek out, community participation. Parents and other community members clearly believe their participation is critical to their mission of preserving cultural and tribal integrity. This level of parental investment is the exception; yet even here, parents are concerned about the overall school and not the individual activities operating within the school.

This pattern of school-level awareness holds for the two Extended Year Schoolwide Project sites as well. Given that the impetus for the schoolwide projects implemented in these two schools came from local community activists—including parents within the community at large—it is worth noting that parents' perceptions, as reported in interviews, are essentially the same as parents' perceptions at other schools. Perhaps their perceptions will change as their children have different school experiences. In all schools, however, as we continue our field research efforts and continue to interview parents, we should learn more about parents' perceptions of and involvement in particular special strategies.

Factors that influence parent involvement activities

Across the sites visited during the first year of the study, several factors appear to influence the extent and effectiveness of parent involvement: the design of the program; school support in the form of personnel, money or other resources; school climate; the appropriateness of parent seminars or presentations; and leadership. Each of these is discussed further below.

Design of the program

Special strategies that affect the entire school's operation are more likely to attend to parent roles in the program design than are adjunct programs. Essentially, schoolwide projects, by definition, consider the school and its constituencies as a whole. Comer schools, for example, are designed to integrate parents into school-based teams, and that facilitates parental involvement in other realms as well. Sizer-D, the school with the highest level of parent participation, is adhering more closely to the principles outlined in the theoretical framework of all CES schools than are the four other Sizer schools in this study, but even here, parent participation is much lower than at most of the elementary schoolwide project schools.

Special strategies that are essentially added on to the school's regular offerings, either in the form of additional instruction or additional time, are less likely to incorporate parent involvement into their designs. Although one of the tutoring program sites (Tutoring-A) does provide information to parents of participating children (for example, by sending progress reports home and inviting parents to attend conferences during the school year), notification of parents is only one aspect of parent involvement. Unless the school already has a strong parent involvement component, it seems unlikely that an add-on program would affect the ways parents are involved in the school.

School support

The actualization of support for parent involvement takes a variety of forms, ranging from belief that it is valuable, to dedicated staff, to scheduling meetings at times convenient to parents, to a parent resource room, to providing transportation and food to parents when they attend school-based events, to listening to parents' concerns. All appear to be important in signifying the school's commitment to parent involvement. Schools that are able to support a home-school liaison position are conveying to parents and the wider community (both within and outside the school) that parent involvement is worth pursuing. While the day-to-day responsibilities of liaisons vary across schools, a typical liaison's duties might include contacting parents about their children's absence and or academic performance, serving as an advocate within the school and community, making referrals to other services, and arranging parent workshops or seminars. Schoolwide project sites are more likely able to create and fund such a position than are sites with adjunct types of special strategies.

Parents can also provide key political support to a school. Parents at an urban Sizer (Sizer–A) school were angered by the school board's decision to close their neighborhood school when asbestos was discovered in the school's structure. Parents and community members lobbied successfully to have the asbestos removed and ultimately to reopen the school. During the renovations, students attended a different school. The combination of parents' and school staff's support was pivotal in the decision to keep the school in the neighborhood.

School staff members sometimes express divergent opinions about the levels of parent involvement in a school. The principal at the Paideia-B school believes parents' role is to maintain the enthusiasm for learning that children experience in the seminars, and that the program has increased communication between parents and their children about learning. Teachers in the same school indicated on a survey, however, that they believe parent involvement has suffered as a direct consequence of Paideia implementation. In a suburban schoolwide project site (Schoolwide–D), the recently hired principal believes that the existing parent advisory council represents the first step in bettering the rapport between homes and school; some other professionals in the building, on the other hand, asserts that the school has no parent involvement to speak of. School staff were not specifically asked about parent involvement outside the special strategy; during future visits, we will continue to explore staff/school perceptions about parent involvement in the school overall.

School climate

Respect and a welcoming attitude toward parents as adults, parents, and learners also appear to contribute to effective parent involvement efforts. Schools that welcome parents into the buildings as volunteers, as parents, and as learners themselves in parenting classes, adult literacy, or English-as-a-second-language classes seem to send a strong message into their communities about the ways parents can participate in the school. Both Comer schools employ parents and community members within the school as clerks and classroom aides. One of the urban schoolwide project sites (Schoolwide–A) has also created a number of paid positions for parents as aides around the school; parents are welcomed as volunteers in other capacities as well. Schoolwide project sites can differ on this dimension as well, because *all* parents are potential participants.

Parents can sense when school staff seem unwelcoming, and they can react strongly when they perceive the school building to be inhospitable or the staff to be unresponsive. The parent of a child who attends a rural CCC site commented that she hoped she could transfer her children to a different school because she felt the principal and teachers were unwelcoming, on the one hand, and that the school was "filthy," on the other. The parent of a child at the Extended Year Schoolwide Project–A site remarked that school staff had continued to promote her son despite the fact that he could not read. One of the Success for All sites (SFA–B) strongly encourages parents to visit the school, and many parents do so.

Appropriateness of parent seminars or presentations

The more comprehensive parent involvement efforts respond to parents' needs. A workshop in a school serving Spanish language students, for example, may well be more effective if presented either in Spanish or in English with a Spanish interpreter. Schools that recognize parents' cultural and language differences—in scheduling, topic selection, language, and expectations for their children—are more likely to be successful in helping families understand and manage differences between home and school. One urban Success For All site (SFA–A) has students whose families are recent Asian immigrants, and a parent coordinator who speaks only one of the several languages now represented in the school (such as Vietnamese, Laotian, and Cambodian). As a result, despite considerable school effort, only a portion of the children's families can communicate effectively with school staff.

Effectively building leadership

The principal of a school demonstrates commitment to parent involvement by setting a tone within the school, by allocation of resources, and through her or his implicit and explicit philosophy of education. The schools with the most active parent involvement generally have strong and dedicated administrative leaders, leaders whose efforts in other realms (as instructional leaders, as advocates for children, and as managers of organizations) are also effective. The administrators who were integrally involved in schoolwide project planning and implementation are often characterized by staff and parents alike as effective leaders.

By contrast, schools whose principals are perceived as ineffective leaders are also less likely to have strong parent involvement. Several schools are currently administered by principals who inherited the special strategy or who were forced by district or state staff to implement that strategy. Particularly where the strategy is a philosophical approach, the principal's leadership is key, and where the principal is indifferent or adversarial toward the special strategy, the outcome is rarely successful.

Urbanicity

It is not clear whether and, if so, how urbanicity is associated with parent involvement. Many of the strong parent involvement schools are in urban areas, but setting is confounded with program differences in this study. An artifact of our sample is that we do not have any urban sites where the strategy is an adjunct to the regular instructional program. The special strategy schools with strong parent involvement programs are all either schoolwide projects or philosophical approaches. (The two elementary rural sites that do have very active parent participation are, in fact, schoolwide project sites, and the high school with the greatest parent involvement, Sizer–D, is also a rural site). As a result, urban and rural differences may be less meaningful than they appear at first glance.

There may nevertheless be urban and rural differences. For the 1990-91 school year nationwide, we know that schoolwide projects are much more likely to be found in urban than suburban or rural schools (Millsap et al., in press). It may be easier for an urban school to meet the criteria necessary for a schoolwide project. The difference between schoolwide projects and other types of strategies is worth discussing because schoolwide projects are required to conceive a plan for the school, and the plan is developed by a committee with teachers, parents, and administrators who together articulate a long-term plan for the school. This planning allows the school to think about goals and means. Other schools may simply not have the luxury of such planning time. Another difference may be that some schoolwide projects get additional financial resources (as is the case in six of the urban schoolwide project sites in this study); the availability of increased resources for these sites may have affected their ability to support parent involvement activities more effectively.

The second possible explanation is that rural and suburban schools may draw their students from much larger geographic areas. By contrast, many of the urban schools in this sample are neighborhood schools, and children walk to school. Children who attend suburban or rural schools are often bussed (or are driven). Schools populated by students who must be transported may be less accessible for parents to visit than their urban (walking distance) counterparts.

Questions for the future

As we continue our field work, we will encounter parents whose children are no longer participating in particular strategies, children who have moved to another grade level, and strategies that affect different grade levels differentially. We will learn, for example, whether Comer-A, the school that hopes to involve parents in program planning, has made progress toward its goal, and whether the principal and staff at the suburban schoolwide project site (Schoolwide–D) have moved closer in their understanding of the level of parent involvement at the school. Another question is whether typologies developed by researchers in other contexts are meaningful in understanding the Special Strategy schools' parent involvement efforts. Other key questions include whether parent involvement does differ between rural/suburban and urban sites, whether the factors currently associated with parent involvement continue to play significant roles, and learning whether parent involvement has an effect on the strategies themselves.

Chapter Ten

Issues in Replicating Special Strategies

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Overview

A major research question for the study of special strategies is to assess the replicability of alternative and successful strategies by evaluating factors that facilitate or impede their implementation. Over the three years of the study, we will approach this question through two sets of comparisons:

- Implementation across each pair of programs in the studies; and
- Implementation across exemplary programs and more representative versions of each type (in years two and three).

This chapter summarizes the major implementation issues using each pair of special strategies' "exemplars" of the special strategies. Had each of the 25 schools in the study been fully implementing its model, this chapter would not be as rich in what factors facilitate or impede progress. But some schools are much further along than others, so we have considerable information on what factors appear important based on our first year of field research. Implementation issues will be further informed by the "replication" sites—representative programs rather than "exemplars" of the special strategies—that we will visit in the coming two years.

In looking within and across strategies, several working hypotheses have emerged that are documented in the earlier chapters:

- Implementation issues vary with the intended magnitude and scope of the special strategy on the structure of the school and the content of the curriculum.
- The more complex the project, the longer the amount of time needed for it to become fully implemented. Across almost all special strategies, the aspect of schooling slowest to change is the content of the core curriculum.
- With the exception of some adjunct programs, all special strategies visited continue to evolve.

- Although the specifics vary by type of strategy, well-implemented special strategies share a number of characteristics:

  - √ Principals with effective leadership skills;
  - √ Committed and experienced teaching staff;
  - √ Clearly articulated and well-understood curriculum that matches the perceived needs and objectives of the school;
  - √ Sufficient time for planning, reflection and adaptation;
  - √ Extra resources, not only in real dollars for materials, staff development, and planning time, but also in terms of volunteer time from school staff and others.

- High poverty schools are very much alike, whether in inner city or rural areas. They have a large proportion of multiple needs children and limited resources within their immediate environs.

- Urbanicity appears important in two respects: access to resources and flexibility to change staff. Schools in small towns and rural areas appear to rely heavily on state and other external funds to initiate new efforts; they also seem more constrained than their urban counterparts to change staff.

In this chapter, these preliminary findings are reexamined with an eye toward what is needed to replicate these programs successfully elsewhere. Considerations for replication are discussed under four topics:

- Preconditions to implementation;
- Roles of key staff (that is, principals, teachers, and parents);
- Instructional methods and curriculum; and
- Needed resources, including hidden costs.

The final section of the chapter looks at the few, explicit differences we have so far identified between strategies implemented in urban and suburban/rural settings. Questions for the future are elaborated as well.

The chapter is organized around three major program types—philosophical approaches, Chapter 1 schoolwide projects, and adjunct programs—because each reflects a different challenge to current school operation. Philosophical approaches, represented here by Sizer, Paideia, and Comer schools, offer the greatest challenge to traditional schooling and affect at least two of the following three core areas: the decision making structure of the school, instructional methods, and content of the core curriculum. The second type, schoolwide projects, may affect all three areas as well but hinges upon the vision of the principal more than on the vision of external actors. Of the three types, adjunct programs are the least intrusive on current school operations. They may include new content and instructional methods, but they do not radically influence the content or delivery of the core curriculum nor do they challenge the traditional structure of schools.

Philosophical approaches to school reform

Among the special strategy schools are three approaches that derive from a philosophical base about the fundamental goals of schooling: Coalition for Essential Schools (or Sizer schools), Paideia schools, and Comer schools. The Coalition for Essential Schools and Paideia schools both support fundamental change in teaching methods and the core curriculum in schools. Comer schools urge fundamental changes in the decision making structures of schools and in expanded services and curricula for children.

Preconditions to implementation

As discussed in Chapter Five, schools need to establish a welcoming attitude toward change, need to be well-managed, and to have sufficient autonomy for effective site-based management, including autonomy over the initial decision to implement the strategy. Where these radical reforms were seen as the most appropriate solution for the school's problems and where schools had sufficient authority to allocate resources and transfer teachers, the special strategies are being implemented with considerable enthusiasm. In the Sizer-B high school, for example, the Sizer philosophy is seen as the ideal approach to counter its dismal attendance and high dropout rates. The principal, teachers, and the superintendent all realized that the ninth grade program was very difficult to teach, so they focused their initial efforts there. Where schools are reluctant participants, on the other hand, implementation is fragmented and incomplete. In Sizer-E, the Sizer "school" is so far not much more than a collection of Sizer "classrooms."

Furthermore, ongoing school management issues can overwhelm a strategy. In the Comer-B school, for example, the Mental Health Team has not looked outward to the mental health and social needs of the community because it is immersed in school discipline issues that under other circumstances would come under the purview of the assistant principal.

Roles of key staff

Principal. In all philosophical approaches, the principal must be a strong supporter of the model, though need not have been an instructional leader. For Sizer high schools, the principal's visible commitment is needed to implement the program throughout a grade or school, and to provide the managerial and scheduling support that teachers need. In one of the better implemented Sizer schools, for example, the principal is described by one team leader as follows:

> It amazes me how wise [the principal] is. She has so much common sense at the management level. She is always positive, never negative. She encourages teachers to be leaders and to travel for professional development. She opens the school to parents. She is a public relations person, and is excellent at getting special grants.

In Sizer-E, where the principal has taken a "hands-off" attitude, on the other hand, the teachers have created interesting interdisciplinary units, but must work within the traditional schedule of eight or nine periods of 42 to 47 minutes each, rather than in the multi-hour blocks suggested by Sizer. They must also do joint planning on their own time. The major energy to sustain the project here comes from the collective of teachers who have volunteered to implement the program.

The principal's support is also needed to counter the inactivity of reluctant or opposing teachers, a critical concern because the ultimate aim of philosophical approaches is to transform the entire school. In the Sizer-A school that is going schoolwide in the fall of 1991, the principal is attuned to needs of reluctant teachers:

> If we're going to create a shared vision, everyone has to be on board . . . to function as a total school. . . . I'd like to have a teacher center right here at the facility and include materials and readings and invite people like Sizer to come in and have informal chats with teachers. . . . Some of them are going to need a lot of hand holding and reassurances. They are afraid of change, . . . but they are going to have to do it.

In one Paideia school, the principal upgraded the teaching staff by not renewing the contracts of uncertified teachers. In the other Paideia school, a 25 percent turnover in staff resulted in current staff more dedicated to the Paideia concept.

In the Comer model, a principal must relinquish her or his traditional authority role to share decision making with parents, teachers, and other staff. The chair of the School Planning and Management Team is rotated on a regular basis. As evidenced in Comer-B, the Comer model cannot be implemented well if the principal is not an advocate of shared decision making.

Teachers. Teachers play a critical role in all three philosophical approaches because the translation and implementation of the philosophy is in their hands. For some teachers, their involvement has been a transforming experience. As one teacher said: "This program gives the teacher a chance to improve and enjoy his or her career more, but it doesn't guarantee it." Where teachers are enthused about the strategy, the voluntary commitment of time and resources is astonishing, as shown below.

> One teacher applying to the Sizer-B high school was asked: "What weeks out of the summer can you give for curriculum development?" "Give?" the applicant teacher replied. The teachers explained that all members of the team spent at least three or four weeks of their own time to develop materials and curriculum.

> All honoraria and fees paid to the teaching staff in the Sizer–A school for the training and presentations they conduct for the Coalition of Essential Schools and Brown University are donated to their high school for student scholarships. The teachers collectively made that decision.
>
> In the Sizer–E project where no joint planning time was provided, teachers worked on their own time to get some projects together. They would have done more interdisciplinary work, but needed time during the school day or some paid work during the summer.

While the above examples draw on the Sizer schools, teacher commitment and experience were key to successful implementation in all schools. How well Adler's principles are followed appears to depend upon individual teachers as much as schools, according to our first classroom observations in the two Paideia schools.

Parents. Parents play a key role in Comer schools, where the school and community are to work jointly in providing education for inner city children. For the Comer model to succeed, community participation, particularly from parents, is critical at all levels of school functioning. In both Comer schools, parent involvement in the school was high, but in only one school (Comer–A) were the parents active in school decision making (including the hiring of teachers). In this well-implemented program, staff, students and parents feel a sense of ownership and personal responsibility for the school program.

Instructional methods and curriculum

For philosophical approaches, a major challenge is how to translate the philosophy into concrete instructional strategies. To date, the core curriculum has been the slowest to change. Personalizing the curriculum seems to be implemented first in Sizer schools, facilitated by the 80 to 1 student/teacher ratio (down from the more typical 150 to 1 student/teacher ratio found in most high schools). One school spent a year developing a "tone of decency," an atmosphere where students respected teachers and their fellow students.

Implementing Sizer principles in the curriculum and teacher pedagogy requires an overhaul of traditional teaching and classroom scheduling as well as experimentation with such new approaches as team teaching, interdisciplinary units, and alternative assessments of students. There is far more to the Sizer approach than the reduction of class size or elongated class periods. Staff in Sizer–A (the most well-established of the Sizer schools) believe that the key to their success is that they have taken the time to decide what the content of the high school curriculum should be. They have operationalized the "student as worker" concept by well thought-out and carefully designed portfolio requirements and demonstrations. In three of the other Sizer schools, classroom observation revealed as yet little change in traditional pedagogy.

In the two Paideia schools, the Socratic seminars operate throughout all grades every Wednesday morning for 1.5 or 2.5 hours. A more pervasive implementation of Adler's philosophy throughout the school day is yet to be seen. The availability of staff development nearby has made a difference in both schools, as has the presence of Paideia coordinators who can translate the principles into concrete instructional strategies. The major instructional issues remaining include the wide range of reading abilities within one group, large class size, and the lack of planning time.

While the Comer-A school has created a very caring school environment, social competencies have yet to be implemented in the formal school curriculum. School staff, however, are working on an expanded curriculum within the community. Additionally, school staff meet in the housing projects to talk about efforts to decrease the level of substance abuse.

Resources

Extra resources are essential for the successful implementation of the philosophical approaches. These costs are reflected not only in real dollar expenditures for staff time and materials, but also in the hidden costs of extensive volunteer time that principals, teachers and others devote to making substantial changes in their schools.

Real dollars are needed to support the full-time coordinator position in Paideia schools. The coordinator helps translate instructional methods into practice and recommends materials for the Socratic seminars. Additional resources are needed for materials acquisition (an expensive proposition in this "great books" model) and for extensive staff development for all faculty members.

Among the Sizer schools, additional resources are needed for the extra staff positions that allows teachers to have joint planning time. Daily joint planning periods are recommended. Furthermore, extra resources are needed to support the reduced student-teacher ratio of 80-1, about half that found in traditional high schools. Staff development is another increased cost. One Sizer principle is that the per pupil cost should not exceed that of traditional high schools by more than 10 percent. This goal could well mean cutting other services offered in traditional comprehensive high schools.

Comer schools also entail extra resources. This year's cost analyses will explore more fully what resources go into the extended community outreach, the shared decision making committees, and in developing and implementing the expanded curriculum.

Schoolwide projects

Six Chapter 1 schoolwide projects are included among the special strategies. Four were initially selected simply because they were schoolwide—two in urban settings and two in rural or suburban settings. Two other urban schoolwide project schools were selected because of their 19-day extended year program. On further examination, we found that all but one schoolwide project has an extended year feature, and that the extended year schoolwide projects are much more interesting in their entirety. Hence, these six schools are treated as a single group.

The two Success for All schools share features of schoolwide projects, because they operate in those settings. They appear to require much of the same preconditions as other schoolwide projects. (Because Success for All shares with adjunct programs a concern with fidelity to a prespecified instructional program, those features are discussed in the following section.)

The more well-implemented schoolwide projects share the following characteristics:

- The principal has a vision of what the school should be about. Included in the vision are these common goals:
    - √ To develop a learning environment that demands excellence. Have high expectations for all students, and a commitment that all children can succeed.
    - √ To build a sense of self-confidence and individual responsibility in children, by attending to the social as well as instructional needs of children.
    - √ To focus instruction on prevention, not remediation.
    - √ To assist parents to work with their children on education. Parents are to have an increasing degree of autonomy regarding the quality of the school and teachers.
- The principal is seen as an instructional leader and strong manager. Relations between the principal and teaching staff are characterized by mutual respect.
- Teaching staff is experienced, committed and empathetic to needs of the community.
- Educational decision making is at the school level, including (some) allocation of resources.
- Professional support is available for the social and emotional needs of children.
- The school has both an academic year and extended year component.
- School has a strong parent involvement component, usually with a paid community liaison person.

Preconditions for implementation

As with philosophical approaches, the more well-implemented schoolwide projects are those in schools that welcomed change, are strongly managed, and have an atmosphere of mutual respect among all staff. Site-based management and programmatic/budgetary autonomy strengthen schoolwide projects, especially when principals take a long-range view. For example, the principal of one extended year schoolwide project commented:

> I don't want teachers to get used to something they can't keep. I never wanted a program like that. One schoolwide program put all its money into personnel, including full-time aides in classrooms, so they couldn't buy any materials. It's unbelievable that they did that. I make sure teachers get materials. I've saturated rooms with materials that teachers say they need. "Ask me, you'll get it." I try to shore them up. I don't want to make them dependent upon another person [like an aide]. I want to get teachers proficient in themselves, so we have really focused on teaching strategies. Our teachers are head and shoulders above other teachers in this city.

Without programmatic autonomy, principals are hard pressed to implement a unifying vision for the school. For example, one schoolwide project (Schoolwide-C), which in other respects appears well-implemented, had to implement a district-purchased "drill and practice" program in its classes, although the program ran counter to the teaching methods strongly espoused by the principal.

In almost all cases, schoolwide projects needed an external impetus—the relaxing of the matching requirements for schoolwide projects that appeared in the Hawkins-Stafford Amendments of 1988. Four of the six schoolwides started after the Hawkins-Stafford Amendments were passed, and principals were informed of the option through their district Chapter 1 coordinators.

Roles of key staff

Principal. Unlike the philosophical approaches where the vision for the school is external, the principal is responsible for providing the vision for the schoolwide project. Without a unifying vision, schoolwide projects appear to be defined by what they no longer are. That is, Chapter 1 is no longer a separate pullout program; Chapter 1 materials are not segregated from use by other students; and average class size is somewhat reduced, but teachers vary little from whole class, teacher-directed instruction.

Shared educational decision making is also a hallmark of the more well-implemented schoolwide projects. In some instances, the decision-making teams consist of the principal, a schoolwide project coordinator (in some but not all schools), master teachers in reading and math, and other professional support personnel. In two extended year schoolwide projects, parents comprise 5 of the 13 members on the decision making team. Other committees are often found; some offer a "case management" approach for working with low achieving students, while others focus on grade specific instructional issues.

The expanded involvement of faculty in school operations and planning often brought out the most visible changes. As the reading specialist in one school noted, "The biggest change is in the people, the planning and working it out together, in seeing their ideas come into play."

Teachers. Teachers have a major role to play in schoolwide projects, because they implement the instructional vision of the principal and often have an increased decision making role. In the better implemented schoolwide projects, teachers are changing their instructional methods to capitalize on reduced class size. Many are also trying to implement a whole language approach using core literature. Where schoolwide projects are most fully implemented, staff commitment and staff congeniality are readily apparent:

> One third grade teacher remarked on the extra things she does with students outside of class. "Sometimes on weekends, I take the girls home with me. They don't know a lot of things. I took them to the bank with me once, and after I made a deposit, one asked: 'Why are you giving your money to them?'"
>
> In one school, the first grade teacher had been out sick for two months. Prior to that she had had problems with classroom and teaching reading. In the bi-weekly school improvement meeting, marked by its friendly, open and nonthreatening tone, the group of teachers discussed ways to provide support with the returning teacher. One teacher volunteered to give up her classroom assistant for two to three days a week, a master teacher agreed to come to class to model the whole language approach, and a math specialist volunteered to work with her individually on math lessons.

Because principals must work with the entire faculty in a schoolwide project, a major issue is working with the more reluctant faculty. In the two extended year schoolwide projects, all faculty (and the principal) were interviewed for their positions and had to make a five year commitment to the school before they were hired. All teachers interviewed take the five-year commitment very seriously. In another schoolwide project (Schoolwide-A), the principal brought transfer forms to one start-up meeting, urging teachers who were not comfortable with the approach to consider transferring to other schools. More than half the faculty changed over in the rural schoolwide project (Schoolwide-C), in part because the principal instituted a thorough student and teacher assessment system.

Parents. In all schoolwide projects but one, community outreach and parent participation are hallmarks of the program. In the well-implemented projects, school staff are aware of the impoverished conditions under which most children live. While 75 percent of the students must be on free or reduced lunch for a school to qualify as a Chapter 1 schoolwide project, several of the schools visited had poverty rates over 90 percent. Many children in these schools have multiple needs, and schools recognize that they must work with parents and the community to address them. Parent activities extend beyond parent volunteers to include food and clothing drives, parent education classes, English-as-a-second-language and Spanish-as-a-second language classes, home visits and monthly parent meetings. Expectations for an ongoing parent role were reflected in classroom observations as well. In one extended year schoolwide program, for example, one first grade teacher asked each child: "Whom did you read to last night?" Only one child had not read to an adult. He was reminded to read to his mother that night. Another teacher has parents sign off on daily homework assignments.

Instructional methods and curriculum

The extent to which instructional methods and curriculum have changed in schoolwide projects varies across the six schools. Two schools (Schoolwide-A, -B) report following Madeline Hunter's prescriptions for effective instruction. Her guides to effective lessons emphasize setting objectives, anticipatory set, input and modeling, and checking for understanding. In one school, it was instituted primarily to give structure to the poorer performing teachers. The two extended year schoolwide project schools shifted to a literature-based curriculum. After four years, the principal and teachers report that the program is almost in place. In some schools, there seems little variation from more traditional teacher-directed instruction. Additional classroom observations will provide a more complete picture.

Topics for staff development vary from school to school, usually based on individual school needs. Whole language instruction, cooperative learning, multi-racial curricula, and assertive discipline have all been subjects for staff development.

The extended year program is a central part of most schoolwide projects. It is supported to minimize student performance losses over the summer, to provide a safe and healthy environment for children, and to promote increased interest in learning through enrichment activities. In both urban and rural areas, the extended year was adopted because it provides a safe place for children. In several urban schoolwide projects, adults do not let their children play on unsafe streets. For many children, the extended year also means a continuation of free breakfasts and lunch program. The extended year is also seen as a more relaxed time for both teachers and students. In one schoolwide project, the first grade teachers did team teaching around a common theme (e.g., oceanography). Added to the in-class work would be a trip to the Science Museum and the nearby ocean (which many children and their parents had never seen). The extended year component is not without its disadvantages. Two principals thought that because the program was voluntary, some of the children who most needed the extra days were not attending.

Resources

Extra resources are needed to operate schoolwide projects, and all schools have hidden costs as well. One urban school district (Schoolwide-A, -B) concentrates Chapter 1 resources in its schoolwide project schools. Its allocation to non-schoolwide project schools has decreased to accommodate this change.

Another urban district made a five year funding commitment to its extended year schoolwide projects. Additional professional support staff, more instructional aides, staff development, additional school days, and reduced class size are supported through a combination of state compensatory education and desegregation funds, Chapter 1 funds, and foundation support.

All schoolwide projects have unrecorded costs in volunteer time or donations. In one pair of schoolwide projects, we observed that most teachers routinely spent at least 10 hours a day in the school. Across many schools, teachers often supply their own materials. These include manipulables for mathematics classes and fish and demonstration materials for science classes. One teacher provided each child in her class with two trees—one to plant and nurture in the school courtyard, the other to plant at home. In one school principals and teachers worked for reduced pay to implement an extended year program. The extended year program at the rural schoolwide project paid its principal nothing and teachers only $10 an hour. External donations are an important, though small, funding source for schoolwide projects as well. Some community outreach is designed to recruit local business support. For example, all computer software and program service costs were donated for the computer laboratories in the two extended year schoolwide projects. The cost analysis planned for this year will provide more systematic information on the cost of implementing special strategies. A continuing resource issue is how to replicate these programs without taking donated time and resources for granted.

Adjunct programs to the core curriculum

Adjunct programs are distinguished by their self-contained instruction and curriculum. They pose no change to the core instruction and curriculum, nor do they challenge the decision making in the school. Another hallmark of adjunct programs (excluding the extended time programs) is their fidelity to a particular model. For the computer-assisted-instruction programs, for example, the curriculum is entirely software based. The METRA tutoring program also follows prescribed steps. Reading Recovery is an elaborate and highly prescribed instructional approach, building on cues and miscues that children use in learning to read. Success for All's instructional package is also pre-specified, including all curricular materials; it operates, however, in a schoolwide context.

Preconditions for implementation

Unlike philosophical approaches and schoolwide projects which require managerial and technical expertise at the school level, the primary preconditions for adjunct programs are minimal. One is a sufficient financial investment and staff time to learn (or acquire) the prepackaged technology; while the other is sufficient interest and commitment to ensure that the adjunct program is somewhat integrated with regular classroom instruction.

Roles of key staff

Principal. A primary role of the principal is to ease the transition of the adjunct program into the school and optimize its utility for the core curriculum. In the extended day program, the principal was the program's central developer. For the computer-assisted-instruction program operating in a schoolwide project (CCC–A), the principal supported the teachers' increased use of student performance records in CCC to inform the core instruction. The principal can also minimize transition time by arranging a convenient time schedule and school location for the adjunct program, two core requirements for its successful operation.

Teachers. There are two major implementation issues for teachers. Those providing the adjunct program's instruction must be sufficiently trained to ensure fidelity to the prototype, and those providing the core curriculum must integrate the adjunct program, to the extent possible, into the core curriculum.

Ensuring fidelity to the prototype is relatively straightforward for such programs as extended day, CCC, and tutoring. For Reading Recovery and Success for All, ensuring fidelity is more demanding. The primary avenue to ensure fidelity to the Reading Recovery model is extensive training. One benefit to the year-long training is that the fact of enduring the hardship can create a certain esprit de corps among Reading Recovery teachers which may also be a factor in its success. Certainly many Reading Recovery teachers are "true believers." Ensuring fidelity to the Success for All model is difficult, in part because all teachers at the grade level served are to participate in this highly prescriptive replacement for the core curriculum. In the more successful implementation (SFA–A), the school principal negotiated compromises prior to accepting the program. In the less successful site, the current principal arrived after the agreement to participate was signed. Discussion to adapt the program to match school needs began three years after SFA began.

Ensuring integration into the core curriculum is an implementation issue with several adjunct strategies. Unless teachers accompany their students to the CCC lab, as is the case at CCC–A, the classroom teachers have little information about the content of the CCC program, and no joint planning time is provided. In one Reading Recovery site, the Reading Recovery teacher and classroom teacher unknowingly gave conflicting instructions to one beginning reader: One encouraged her to find meaning in illustrations, while the other admonished her for looking at the pictures. Furthermore, in the less well-implemented Success for All site, teachers wanted to supplement materials but felt constrained from doing so.

Parents. Adjunct programs typically do not have parent involvement as an explicit objective. The two exceptions are Reading Recovery and Success for All (which mirrors other schoolwide projects in this regard). The extent to which parents are actively recruited to participate in educational activities is a function of the school and its outreach program.

Resources

The appeal of such adjunct programs as METRA, peer tutoring, and the extended day Chapter 1 Club is that, for the most part, they are small, inexpensive, and typically relatively easy to install and operate. Others are more costly, including Success for All, which operates as a schoolwide curriculum; Reading Recovery, where an individual teacher can see no more than 8 to 10 children a day, and CCC, which requires a heavy start-up investment in equipment, software, and additional space. The upcoming cost analysis will provide more information on costs of all special strategies.

Implementation in rural and urban areas

A central assumption behind the two studies of special strategies for educating disadvantaged children is that schooling, facilities, the needs of children and their families, and the choice of strategies and their implementation vary in urban and rural settings. To date we have found few differences between urban and suburban/rural schools in our special strategy schools, although rural schools may have less access to financial resources and less flexibility in changing staff.

Rural schools have tended to rely more on state funds for initiating innovations than urban schools. Of the five Sizer high schools, for example, neither small town school would have implemented the program without the state funds available through Re:Learning. Similarly, those principals who have engaged in grant-writing are found in the urban rather than rural schools in our sample. Not all urban principals, however, are writing grants.

While the urban schools implementing a schoolwide program or schoolwide philosophy often experienced significant staff turnover, the suburban and rural schools appear less likely (and perhaps less able) to transfer staff to other schools. In a small town, the school district is often a major employer; reducing staff often guarantees unemployment in that community and a move to another location.

It also appears that all high poverty schools (whether rural or inner city) share something in common—multiple needs children coupled with limited resources in the immediate environs. These settings seldom have the comprehensive services students need. Available community health and volunteer services are quickly exhausted in the face of intergenerational poverty, alcohol and substance abuse, and family and community violence. Schools are often ill-equipped to provide a meaningful educational program to multiple needs students, and even programs designed to bring multiple resources into the school (such as Comer schools) can be limited by the impoverishment of the community.

The special strategy schools in high poverty communities often tackle these problems head on. Aggressive principals and staff solicit resources through grant writing, integrate comprehensive services to the extent possible, address parents' as well as children's needs, and keep the school doors open after school and during the summer to provide a safe and nutritious environment for their students.

We have also found in high poverty settings (urban and rural) that the demographics of the community are rapidly shifting (usually with an increased proportion of limited-English proficient students). Demographic shifts affect what services are needed and how they can be delivered. Furthermore, issues of minority group isolation are compounded by linguistic differences.

The high poverty settings stand in marked contrast with the more affluent suburban and urban areas in our study. With a more solid fiscal base, schools in these communities are able to support more and higher salaried personnel. Furthermore, school personnel can rightly assume that individual families have expendable income as well. The dollar or two (or more) needed for special books and other resources can be provided; and the PTA can set its fund-raising sights on building the playground, not just on adding a few books to the library.

Questions for the future

Future field work plans include both the original 25 schools as well as 24 additional schools, reflecting other examples of select program types. The major questions to be pursued will continue to focus on requirements for replication, including the preconditions to change, roles of personnel, alterations in curriculum and instruction, and program costs.

As we continue in our second and third year of field work in these communities, we will examine more thoroughly the effects of urbanicity on the implementation of special strategies.

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Appendices

Appendix A

Parents Interview Guide

[Note: Parents will have completed the Prospects' Parent Survey so much of the information requested here refers to the current observation period.]

We are conducting a study of promising practices to enhance student learning. The _ _______ school with its _________ program was selected as an example of such a promising program. As part of our study, your child is one of those whom we have observed during the school day.

1. How typical a day do you think this has been for your child? Has anything unusual been going on that may have influenced how he/she was in school today? Please describe how you think this day is typical or atypical.

2. How much contact do you have with your child's school? with your child's teacher? When was the last contact you had with the teacher? Please tell us about the contacts you have had with the school and the topics you have discussed.

3. Has your involvement with the school changed since your child has been in the program? If so, in what ways?

4. Please tell us what you do at home to reinforce what your child learns in school.

5. What do you think are the most important things that your child has learned through this program so far this year?

   Probe not only for academic achievements but also for the learning of social skills, sense of personal responsibility and other goals associated with the particular program.

6. [Since we last met with you in _________,] what changes have you seen in your child's learning and development?

7. Has what he/she has learned met your expectations? Are there things that you are especially pleased about? concerned about?

8. What do you think are the greatest strengths of this program?

9. What do you think are the programs greatest weaknesses? How could the program be improved?

10. Are there other things that we should know about your child and the program?

Thank you very much. We look forward to meeting with you again when we return to the school in __________.

Appendix B

Special Strategies Observation System

(SSOS)

153-163 - 94 - 11 : OL 3

S.S.O.S.

TEACHER#____________________ SCHOOL#_______ SUBJECT____________ DATE ____________

Highest Total # of STUDENTS in classroom ______ # ADULTS______ OBSERVER____________________

ACTIVITY CODE	TIME	DESCRIPTIVE NOTES

Activity Code Key:

1= Teacher Presentation of Content
2 = Recitation/Discussion
3 = Directions for Assignments
4 = Individual Seatwork
5 = Pairs or Group Seatwork
6 = Student Presentation
7 = Small Group Instruction
8 = Tests
9 = Procedural/Behavioral Presentation
10 = Administrative Routines
11 = Checking
12 = Transitions
13 = Non-academic Activity
14 = Waiting Time
15=Discipline

2 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME_____:_____a.m/p.m.
# ON TASK _______
# OFF TASK _______
WAITING _______

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

10 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME_____:_____a.m/p.m.
# ON TASK _______
# OFF TASK
WAITING _

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

KEY TO TASKS:
I = Interactive Instruction
W= Work alone
M =Management/Directions
S = Social or uninvolved

QUALITY OF INSTRUCTION

Teachers

- State objectives ___
- State purpose ___
- Check for understanding ___
- Reteach concepts if needed ___
- Ask several academic questions ___
- Use open ended questions ___
- Elaborate on answers ___
- Offer assistance ___
- Give wait time (3 seconds) ___
- Give guidance if missed ___
- Prompt student to elaborate ___

Students

- Know expectations ("what") ___
- Know relevancy ("why") ___
- Initiate discussions ___
- Plan learning ___
- Actively participate ___

APPROPRIATENESS

Teachers

- Understand material ___
- Use a variety of tasks ___
- Relevancy ___
- Probe for student knowledge ___
- Group for instruction ___
- Coach ___
- Develop social skills ___

The task's difficulty levels appear too difficult for _____% of students.

The tasks appear to be unchallenging for _____% of the students.

INCENTIVE

Teachers

- Instruction based on student interest ___
- High expectations ___
- Warm and accepting ___
- Enthusiasm for subject ___
- Give accurate feedback to academic work ___
- Give academic praise ___
- Give feedback for behavior ___
- Behavioral praise ___
- Give feedback ___
- Use positive tone ___
- Use negative tone (-) ___

Students

- Initiate academic questions ___
- Diverge from given lesson ___
- Incentives seemed adequate for majority of students ___

TIME USE

Teachers

- Start class on time ___
- Routines well established ___
- Have a lively pace ___
- Require minimal management ___
- Permit few disruptions ___
- No external interruptions ___
- Academic focus ___

S.S.O.S.

TEACHER#________________ SCHOOL#______ SUBJECT__________ DATE ________

Highest Total # of STUDENTS in classroom ______ # ADULTS_____ OBSERVER________________

ACTIVITY CODE	TIME	DESCRIPTIVE NOTES

18 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:____a.m/p.m.
# ON TASK ______
# OFF TASK ______
WAITING ______

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

26 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:____a.m/p.m.
# ON TASK ______
# OFF TASK
WAITING ______

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

Activity Code Key:

1= Teacher Presentation of Content
2 = Recitation/Discussion
3 = Directions for Assignments
4 = Individual Seatwork
5 = Pairs or Group Seatwork
6 = Student Presentation
7 = Small Group Instruction
8 = Tests
9 = Procedural/Behavioral Presentation
10 = Administrative Routines
11 = Checking
12 = Transitions
13 = Non-academic Activity
14 = Waiting Time
15=Discipline

KEY TO TASKS:
I = Interactive Instruction
W= Work alone
M =Management/Directions
S = Social or uninvolved

QUALITY OF INSTRUCTION

Teachers

State objectives ___

State purpose ___

Check for understanding ___

Reteach concepts if needed ___

Ask several academic questions ___

Use open ended questions ___

Elaborate on answers ___

Offer assistance ___

Give wait time (3 seconds) ___

Give guidance if missed ___

Prompt student to elaborate ___

Students

Know expectations ("what") ___

Know relevancy ("why") ___

Initiate discussions ___

Plan learning ___

Actively participate ___

APPROPRIATENESS

Teachers

Understand material ___

Use a variety of tasks ___

Relevancy ___

Probe for student knowledge ___

Group for instruction ___

Coach ___

Develop social skills ___

The task's difficulty levels appear too difficult for _____% of students.

The tasks appear to be unchallenging for _____% of the students.

INCENTIVE

Teachers

Instruction based on student interest ___

High expectations ___

Warm and accepting ___

Enthusiasm for subject ___

Give accurate feedback to academic work ___

Give academic praise ___

Give feedback for behavior ___

Behavioral praise ___

Give feedback ___

Use positive tone ___

Use negative tone (-) ___

Students

Initiate academic questions ___

Diverge from given lesson ___

Incentives seemed adequate for majority of students ___

TIME USE

Teachers

Start class on time ___

Routines well established ___

Have a lively pace ___

Require minimal management ___

Permit few disruptions ___

No external interruptions ___

Academic focus ___

S.S.O.S.

TEACHER#____________________ SCHOOL#______ SUBJECT____________ DATE ___________

Highest Total # of STUDENTS in classroom ______ # ADULTS_____ OBSERVER____________________

ACTIVITY CODE	TIME	DESCRIPTIVE NOTES

34 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:____a.m/p.m.
# ON TASK _______
# OFF TASK ______
WAITING ________

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

42 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:____a.m/p.m.
# ON TASK
# OFF TASK
WAITING

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

Activity Code Key:

1= Teacher Presentation of Content
2 = Recitation/Discussion
3 = Directions for Assignments
4 = Individual Seatwork
5 = Pairs or Group Seatwork
6 = Student Presentation
7 = Small Group Instruction
8 = Tests
9 = Procedural/Behavioral Presentation
10 = Administrative Routines
11 = Checking
12 = Transitions
13 = Non-academic Activity
14 = Waiting Time
15=Discipline

KEY TO TASKS:
I = Interactive Instruction
W= Work alone
M =Management/Directions
S = Social or uninvolved

QUALITY OF INSTRUCTION

Teachers

- State objectives ___
- State purpose ___
- Check for understanding ___
- Reteach concepts if needed ___
- Ask several academic questions ___
- Use open ended questions ___
- Elaborate on answers ___
- Offer assistance ___
- Give wait time (3 seconds) ___
- Give guidance if missed ___
- Prompt student to elaborate ___

Students

- Know expectations ("what") ___
- Know relevancy ("why") ___
- Initiate discussions ___
- Plan learning ___
- Actively participate ___

APPROPRIATENESS

Teachers

- Understand material ___
- Use a variety of tasks ___
- Relevancy ___
- Probe for student knowledge ___
- Group for instruction ___
- Coach ___
- Develop social skills ___

The task's difficulty levels appear too difficult for _____% of students.

The tasks appear to be unchallenging for _____% of the students.

INCENTIVE

Teachers

- Instruction based on student interest ___
- High expectations ___
- Warm and accepting ___
- Enthusiasm for subject ___
- Give accurate feedback to academic work ___
- Give academic praise ___
- Give feedback for behavior ___
- Behavioral praise ___
- Give feedback ___
- Use positive tone ___
- Use negative tone (-) ___

Students

- Initiate academic questions ___
- Diverge from given lesson ___
- Incentives seemed adequate for majority of students ___

TIME USE

Teachers

- Start class on time ___
- Routines well established ___
- Have a lively pace ___
- Require minimal management ___
- Permit few disruptions ___
- No external interruptions ___
- Academic focus ___

S.S.O.S.

TEACHER#____________________ SCHOOL#______ SUBJECT____________ DATE ____________

Highest Total # of STUDENTS in classroom ______ # ADULTS______ OBSERVER____________________

ACTIVITY CODE	TIME	DESCRIPTIVE NOTES

Activity Code Key:

1= Teacher Presentation of Content
2 = Recitation/Discussion
3 = Directions for Assignments
4 = Individual Seatwork
5 = Pairs or Group Seatwork
6 = Student Presentation
7 = Small Group Instruction
8 = Tests
9 = Procedural/Behavioral Presentation
10 = Administrative Routines
11 = Checking
12 = Transitions
13 = Non-academic Activity
14 = Waiting Time
15=Discipline

50 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:____a.m/p.m.
# ON TASK ______
# OFF TASK ______
WAITING ______

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

58 minutes after published time to begin interaction
STUDENT ENGAGEMENT
TIME____:__ a.m/p.m.
# ON TASK
# OFF TASK
WAITING

GROUPS AND ACTIVITIES

	TASK	# STUDENTS
TEACHER		
AIDE		
STUDENTS		
STUDENTS		

KEY TO TASKS:
I = Interactive Instruction
W= Work alone
M =Management/Directions
S = Social or uninvolved

QUALITY OF INSTRUCTION

Teachers

State objectives ___

State purpose ___

Check for understanding ___

Reteach concepts if needed ___

Ask several academic questions ___

Use open ended questions ___

Elaborate on answers ___

Offer assistance ___

Give wait time (3 seconds) ___

Give guidance if missed ___

Prompt student to elaborate ___

Students

Know expectations ("what") ___

Know relevancy ("why") ___

Initiate discussions ___

Plan learning ___

Actively participate ___

APPROPRIATENESS

Teachers

Understand material ___

Use a variety of tasks ___

Relevancy ___

Probe for student knowledge ___

Group for instruction ___

Coach ___

Develop social skills ___

The task's difficulty levels appear too difficult for _____% of students.

The tasks appear to be unchallenging for _____% of the students.

INCENTIVE

Teachers

Instruction based on student interest ___

High expectations ___

Warm and accepting ___

Enthusiasm for subject ___

Give accurate feedback to academic work ___

Give academic praise ___

Give feedback for behavior ___

Behavioral praise ___

Give feedback ___

Use positive tone ___

Use negative tone (-) ___

Students

Initiate academic questions ___

Diverge from given lesson ___

Incentives seemed adequate for majority of students ___

TIME USE

Teachers

Start class on time ___

Routines well established ___

Have a lively pace ___

Require minimal management ___

Permit few disruptions ___

No external interruptions ___

Academic focus ___

CLASSROOM ENVIRONMENT

√ = in evidence
no = not in evidence

- Use of multi-racial materials ____
- Use of nonsexist materials ____
- Daily routine is flexible ____
- Assignments are posted ____
- Classroom is cheerful and inviting ____
- Adequate space for movement ____
- Distinct activity centers ____
- Lighting is adequate ____
- Ventilation/temperature is comfortable ____
- Student work on bulletin boards ____
- Noise from outside is distracting ____

RESOURCES

V = Visible in classroom U = Used this period

Textbooks V U
Workbooks V U
Reference books V U
Classroom library V U
Maps V U
Globe V U
Audio tapes V U
Computers:
Apple II or IIg's V U
Macintosh V U
IBM/compatable V U

Overhead Projector V U
Filmstrips V U
Record player V U
Records V U
Video Disk V U
TV V U
Screen V U

Games V U
Simulations V U
Other hands on materials V U
Science Table(s) V U
Sink(s) V U
Student Chalkboard V U
Teacher Chalkboard V U

Appendix C

Classroom Teacher Interview Guide

The purpose of the Special Strategies Study is to describe promising programs which could be used as alternatives to traditional Chapter 1 programs. As you know, your school was selected to be studied as an example of such a promising program. I am going to ask you some questions primarily intended to find out how and why your school's program came into being, what it is supposed to accomplish, and how it is in fact operating. This information will help our project to learn about the process of innovation, about which elements are typically seen in exemplary programs, and about obstacles to change and how schools can overcome them.

In answering these questions, please think about how they apply to the students you teach.

Program Design and Development

1. Confirm the name of the innovative program in the school: ____________________.

2. What are the main problems the program is intended to solve? What purposes is the program intended to address?

3. Please describe the program.

4. When did planning for the program begin?

5. Who actually designed the program? Did the program originate within this school, or elsewhere?

6. To what degree were you involved in originally designing the program?

7. What are the key elements of the program? Tell me about each of the following areas:

    - Curriculum
    - Instructional methods
    - Additional instructional staff or services
    - Additional non-instructional staff or services (e.g., counselors, social workers, etc.).
    - Adaptations to individual needs
    - Groupings
    - Time allocations, time use
    - Class size
    - Assessment
    - Staff development
    - Relationships among school staff
    - Coordination among different staff
    - Other

    How does this differ from what you've done before?

8. What do you think are the three most important program goals? (Rank from 1 to 3).

Enhancing student achievement _____

Improving thinking skills _____

Increasing self-esteem _____

Increasing parent involvement _____

Improving student attitudes _____

Content of the Special Strategy

9. What changes has the program introduced in the curriculum and instruction of your classroom? Can you give specific examples of changes in your classroom which have resulted from this program?

10. To what degree are curriculum materials used in the regular classroom locally developed, as opposed to commercially available?

11. What specific commercially available materials are you using in your classroom?

12. Does the program provide any supplementary instructional services (such as tutoring, remedial instruction, computer-assisted instruction, Chapter 1 pullout, after-school instruction) beyond regular classroom instruction? Please describe them.

13. How similar are the curriculum materials mainly used in supplementary services to those used in the regular classroom? (e.g., same materials, same materials but different levels, different materials). Please be specific.

14. Do you consider the purpose of supplementary instructional services to:

- Teach the same objectives as those taught in the regular class
- Teach objectives similar to those used in the regular class
- Teach objectives different from those taught in the regular class

15. When students receive supplementary instructional services, what is the usual group size?

16. For how much time do the target students (e.g. Chapter 1) receive supplementary services? (Minutes per day, days per week, weeks per year).

17. What instruction do the compensatory education students miss if/when they are engaged in supplementary instructional activities?

Coordination Among Programs

18. How do you coordinate regular classroom teaching with supplementary or program instructional services? Is coordination a built-in function? Is time set aside for it?

Please rate the following statements and circle never, sometimes or always.

Regular teachers take primary responsibility for student learning (supplementary teacher plays little role in academic instruction).

ALWAYS SOMETIMES NEVER

Please describe how they do it.

Supplementary or program teachers or aides work in close coordination with regular teachers to support student performance on the same skills taught in the regular class.

ALWAYS SOMETIMES NEVER

Please describe how they do it.

Supplementary or program teachers or aides provide remedial instruction to give students help with material below the level of what they are getting in the regular class.

ALWAYS SOMETIMES NEVER

Please describe how they do it.

Supplementary or program teachers or aides provide their own program of instruction that is separate from what is given in the regular class.

ALWAYS SOMETIMES NEVER

Please describe how they do it.

19. Do supplementary or program teachers use the same reading materials as regular teachers use with the same children?

Yes
No

20. Do supplementary or program teachers use the same math materials as regular teachers use with the same children?

Yes
No

21. About how many times per month do regular and program teachers meet to discuss individual children you both teach?

22. How many times per month do regular teachers, supplementary teachers, and other staff implementing this program meet with each other to discuss plans or problems?

23. How is coordination accomplished (e.g., joint preparation of lessons, common planning time, informal meetings, shared records of student progress)? How effective does the coordination appear?

24. What programs exist in the school over and above those in the innovative program? To what degree are these programs integrated with others?

Student Selection

25. How are students selected to receive supplementary or program services? If different services are provided to different students, how is it decided who receives which services? What specific criteria are used for entry to or exit from particular services?

26. Which of the following do you think are the three most important reasons that students in the program are having achievement problems? (Please rate from 1 to 5. 5 = least important, 1 = most important).

a. Lack of motivation ________
b. Lack of ability ________
c. Different learning styles ________
d. Poor support from home ________
e. Poor instruction in earlier grades ________
f. Students are not developmentally ready ________
g. Cultural factors ________
h. Students have limited English proficiency ________
i. Regular classroom instruction is unable to meet student's needs ________
j. Chapter 1 instruction is unable to meet students' needs ________
k. Low expectations by teachers ________
l. No access to high level curriculum ________
m. Tracking practices ________
n. Teacher lack of expertise to teach low achieving students ________

Role of Parents

27. What is the school's outreach program for parents?

28. What are the formal and informal ways that parents are involved in the planning and operation of the program?

29. What opportunities, if any, are there for staff to work collaboratively with parents?

Staffing

30. Who has provided training to supplementary teachers on implementation of the program? How much training has been provided, and how much more is planned?

31. Is there any procedure for helping staff implement changes in curriculum and instruction? (e.g., expert coaching, peer coaching, teachers help each other, informal feedback to teachers).

Program Effects

32. To what degree do you feel this program is accomplishing the following student outcomes?

	A GREAT DEAL	SOMEWHAT	NOT AT ALL
Enhanced Achievement	_______	_______	_______
Increased Self-Esteem	_______	_______	_______
Improved Attendance	_______	_______	_______
Improved Morale	_______	_______	_______
Other (Specify)			

What evidence supports your beliefs?

33. To what degree does the program appear to you to increase the quality of instruction students receive?

A great deal _______
Somewhat _______
Not at all _______

34. To what degree does this program increase the amount of time students receive instruction in reading, math or language?

A great deal _______
Somewhat _______
Not at all _______

35. To what degree does this program increase the amount of time students motivation to learn reading, math, or language?

A great deal _______
Somewhat _______
Not at all _______

Please describe or give examples.

36. To what degree does this program increase the school's capacity to adapt instruction to the individual needs of the students?

A great deal ________
Somewhat ________
Not at all ________

Please describe or give examples.

37. To what degree are students' achievement gains in reading due to the efforts of regular and supplementary teachers?

a. 100% regular ________
b. 75% regular, 25% supplementary ________
c. 50-50 ________
d. 25% regular, 75% supplementary ________
e. 100% supplementary ________

38. What forces have helped the program to succeed?

Consider:

- Clear support/mandate from district, other political actions
- Clear support from parents, community
- Additional financial support
- Excellent staff development and followup
- Excellent relationships among staff
- Outstanding principal staff
- Other

39. What problems or obstacles have been encountered in implementing the program?

Consider:

- Problems with Federal, State, or district regulations
- Opposition from key district, school, or other staff
- Opposition from parents or other community members
- Problems with teacher unions
- Inadequate financial support
- Inadequate preparation of teachers or other school staff(e.g., inadequate staff development, training)
- Problematic relationships among school staff
- Other

Replication

Extent of Implementation

40. When was the program first implemented?

41. How widely within the school is the original developer's vision truly shared? To what extent are school staff aware and supportive of the overall program direction?

Actual vs. Intended Implementation

42. To what degree do you feel that the program is being fully implemented as it was meant to be implemented?

    - Fully implemented as intended
    - Fully implemented with important modifications (describe) ____
    - Partially implemented
    - Poorly or not implemented

43. What changes have been made or are contemplated from the original program plan?

44. What plans are formulated or being discussed for:

    - Full implementation of all program elements
    - Modifications in the program
    - Expansion to other sites or within the same school

Appendix D

Principal Interview Guide

The purpose of the Special Strategies Study is to describe promising programs which could be used as alternatives to traditional Chapter 1 programs. As you know, your school was selected to be studied as an example of such a promising program. I am going to ask you some questions primarily intended to find out how and why your school's program came into being, what it is supposed to accomplish, and how it is in fact operating. This information will help our project to learn about the process of innovation, about which elements are typically seen in exemplary programs, and about obstacles to change and how schools can overcome them.

In answering these questions, please think about how they apply to students in your school at the grade level we are studying (1,3, or 9/10).

Program Design and Development

1. Confirm the name of the innovative program in the school: ________________

—

2. What are the main problems the program is intended to solve?

3. When did planning for the program begin?

4. Who actually designed the program? Did the program originate within this school, or elsewhere?

5. What was your role in the development adaptation of the program?

6. To what degree were the following people involved in originally designing the program for the school?

   - National researchers/developers (e.g., Comer, Sizer, Slavin)
   - Teachers
   - District Chapter 1 coordinator
   - Other district staff
   - Local non-district people (e.g., local university professors, parent groups)

   What were their roles?

7. What are the key elements of the intended program? To what degree does the program involve changes in each of the following areas:

   - Curriculum
   - Instructional methods
   - Additional instructional staff or services
   - Additional non-instructional staff or services (e.g., counselors, social workers, etc.).
   - Adaptations to individual needs

- Groupings
- Time allocations, time use
- Class size
- Assessment
- Staff development
- Relationships among school staff
- Coordination among different staff
- Other

Content of the Special Strategy

8. What changes has the program introduced in the curriculum and instruction of the regular classroom?

9. To what degree are curriculum materials used in the regular classroom locally developed, as opposed to commercially available?

10. What specific commercially available materials are primarily used in the regular classroom?

11. Does the program provide any supplementary instructional services (such as tutoring, remedial instruction, computer-assisted instruction) beyond regular classroom instruction? If so, please describe them.

12. How similar are the curriculum materials mainly used in supplementary services to those used in the regular classroom? (e.g., same materials, same materials but different levels, different materials).

13. Do you consider the purpose of supplementary instructional services to:

    - Teach the same objectives as those taught in the regular class
    - Teach objectives similar to those used in the regular class
    - Teach objectives different from those taught in the regular class

14. When students receive supplementary instructional services, what is the usual group size?

15. For how much time do students receive supplementary services? (Minutes per day, days per week, weeks per year).

16. What instruction do the students miss when they are engaged in supplementary instructional activities?

17. With whom do program staff coordinate other instruction and services? How is coordination accomplished (e.g., joint preparation of lessons, common planning

time, informal meetings, shared records of student progress)? How effective does the coordination appear?

18. How many times per month are staff implementing this program expected to meet with each other to discuss plans or problems?

19. How many times per month do you (the principal) meet with the staff involved with this program to discuss plans or programs?

20. What programs exist in the school over and above those in the innovative program? To what degree are these programs integrated with others?

Selection of Students

21. To what degree are students selected into this school? Is the school a magnet? Does it accept or encourage students from outside of its neighborhood to attend? Can the school dismiss students who don't appear to fit into the school's philosophy? Are students selected for this particular program? If there is a school-within-a-school or students are otherwise selected to participate, how was this selection made, and how can it be changed if students either don't make it or do very well?

22. [If supplementary services are provided,] how are students selected to receive supplementary services? If different services are provided to different students, how is it decided who receives which services?

23. What specific criteria are used for entry to or exit from particular services?

Role of Parents

24. What is the school's outreach program for parents?

25. What are the formal and informal ways that parents are involved in the planning and operation of the program?

26. What opportunities, if any, are there for staff to work collaboratively with parents?

Staffing

For this program in this school, what categories of staff have been added to the program? Consider:

- Remedial reading or math teachers
- Tutors
- Aides/paraprofessionals
- Nurses
- Counselors
- Librarians
- Social Workers
- Parent liaisons, home-school coordinators
- Psychologists
- Additional teachers to reduce class size

For each job title, ask the following:

27. How many full-time or part-time staff do you have with this job title?

28. How are these positions funded (e.g, Chapter 1, Chapter 2, state compensatory education funds, special grants, local funds)?

29. Please describe the responsibilities of staff members with this job title.

30. What level of education or training is required for this position?

31. Who is involved in the decision to hire persons in that position?

32. Who is responsible for evaluating the performance of staff members in that position?

If this position is not instructional (e.g, counselor, social worker, parent liaison), go to item 34.

33. In what subject(s) do staff with this job title teach or assist?

34. What are the three most important goals the staff member (s) in this position are supposed to pursue? (Please rank 1 to 3)

Enhancing student achievement ___
Increasing student self-esteem ___
Improving student attendance ___
Improving student behavior ___
Improving student health ___
Increasing parent involvement ___
Helping teachers with non instructional tasks (e.g., paperwork) ___
Improving student attitudes toward school ___
Other (specify ____________________) ___

35. How successful do you think the staff members in this position have been accomplishing the three top goals you just named?

36. To what degree do staff members in this position directly or indirectly assist regular classroom teachers to do a better job of teaching?

37. To what degree were teachers recruited to work in this particular school or program? (If program is school-wide, substitute school.) Is the teaching staff like that of any school in the district, or is it an unusual group brought together specifically to implement this program?

38. Who has provided training to teachers on implementation of the program? How much training has been provided, and how much more is planned?

37. Is there any procedure for helping staff implement changes in curriculum and instruction (e.g., expert coaching, peer coaching, teachers help each other, informal feedback to teachers).

38. Has the introduction of the program resulted in unusual levels of staff turn-over (e.g., staff deciding or being encouraged to leave the school, or the school becoming unusually attractive to prospective new staff?) If yes, please describe.

Budget

39. How much does the program cost to run? Does the school have funding over and above that provided to similar schools in the district? From what sources are program funds received? What proportion of funds come from each source? (We are not doing a detailed cost analysis, but would like solid estimates of budget figures). Are any changes in budget anticipated?

Program Effects

40. To what degree do you feel this program is accomplishing the following student outcomes?

	A GREAT DEAL	SOMEWHAT	NOT AT ALL
Enhanced Achievement	____	____	____
Increased Self-Esteem	____	____	____
Improved Attendance	____	____	____
Improved Morale	____	____	____

41. To what degree does the program appear to you to increase the quality of instruction students receive?
    - A great deal
    - Somewhat
    - Not at all

42. To what degree does this program increase the amount of time students receive instruction in reading, math or language?
    - A great deal
    - Somewhat
    - Not at all

43. To what degree does this program increase the amount of time students motivation to learn reading, math, or language?
    - A great deal
    - Somewhat
    - Not at all

44. To what degree does this program decrease the school's capacity to adapt instruction to the individual needs of the students?

A great deal
Somewhat
Not at all

45. This program is primarily a ________________ (reading or math or language/arts/writing program. To what extent is it also affecting other subjects (e.g., social studies, sciences, and the others not listed above)?

Implementation

46. What barriers have been encountered in implementing the program successfully? Consider:

- Problems with Federal, State, or district regulations
- Opposition from key district, school, or other staff
- Opposition from parents or other community members
- Problems with teacher unions
- Inadequate financial support
- Inadequate preparation of teachers or other school staff(e.g., inadequate staff development, training)
- Problematic relationships among school staff
- Other

47. What forces have helped the program to succeed? Consider:

- Clear support/mandate from district, other political actions
- Clear support from parents, community
- Additional financial support
- Excellent staff development and followup
- Excellent relationships among staff
- Outstanding principal and/or staff
- Other

Replication

Extent of Implementation

48. When was the program first implemented?

49. How widely within the school is the original developer's vision truly shared? To what extent are school staff aware and supportive of the overall program direction?

Actual vs. Intended Program

50. To what degree do you feel that the program is being fully implemented as it was meant to be implemented?

    - Fully implemented as intended
    - Fully implemented with important modifications (Please describe)
    - Partially implemented
    - Poorly or not implemented

51. What changes have been made or are contemplated from the original program plan?

52. What plans are formulated or being discussed for:

    - Full implementation of all program elements
    - Modifications in the program
    - Expansion to other sites or within the same school

Replicability

53. If this school is an example of a widespread program, to what degree is it seen by the program developers as a special lighthouse school (e.g., frequently visited by potential adopters).

54. Has the program been replicated in other schools, or are there plans to do so?

55. Were this program to be replicated elsewhere, what conditions would have to exist for this to happen?

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